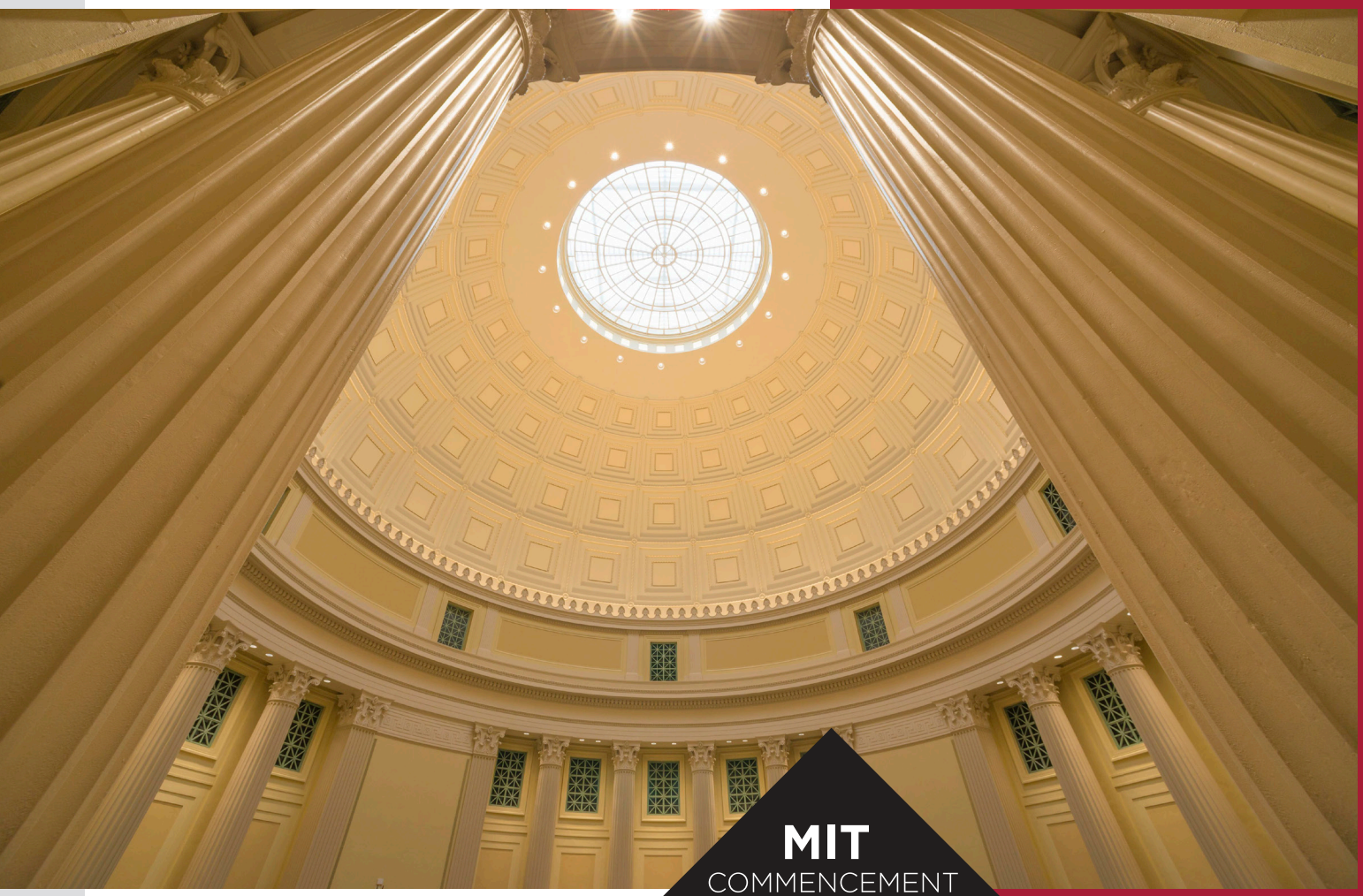

MIT
COMMENCEMENT
2022

MIT Commencement

Honoring the graduates of 2022

Friday, May 27, 2022

Massachusetts Institute of Technology

WELCOME

As we celebrate the graduation of MIT's Class of 2022, we could not be happier to join their families and friends in honoring their accomplishments.

The Class of 2022 will join a global family of more than 143,000 MIT alumni around the world. Across time and across distance, our community is connected by fundamental values and shared ideals: Excellence, integrity, curiosity, openness and a passion for solving tough problems. Together we possess uncommon strengths—and the drive and aspiration to apply them in countless ways to serve humanity.

As we congratulate our new graduates, we dream of the wiser and kinder world they can help create.

L. Rafael Reif
President

Photos
Cover and above: Christopher Harting
Back cover: Andy Ryan

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Elliott S. Yarwood

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Ishaan Govindarajan

Sidne V. Gregory
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Bernardo Hasbach Covian

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Jonathan Maiara

Jordan Christopher McDermott

Fischer Jay Moseley
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Suparnamaaya Prasad
Also with a Major in Course XXI-W
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Brian Wang

Reagan Pauline Zimmerman
Also with a Major in Course XVII

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Kazi Alom

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Minor in Music

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My Uyen Tran Nguyen

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Meenal Parakh
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Muhammad S. Rahman
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Saad Nafim Rahman
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Mahmoud Sobier
Also with a Major in Course XXIV-1

Jesus A. Solis
(February, 2022)

Wilson Banks Spearman

Benjamin F. Spector
Also with a Major in Course XVIII
(See also M.Eng., Course VI-P)

Suraj S. Srinivasan
Also with a Major in Course XVIII

Crystal B. Su
Also with a Major in Course XV-1
Minor in Economics

Chuyue Sun

Daniel D. Sun

Shobhita S. Sundaram
Also with a Major in Course XVIII

Viktoriya Tabunshchyk

Kevin Tang
Minor in Mathematics

Britney Alda Ting

Ritaank Tiwari
Also with a Major in Course XVIII

Deborah Cheron Torres

Moises Trejo, Jr.

Michael N. Truell
Also with a Major in Course XVIII
(February, 2022)

Savannah B. Tynan
Minor in Mathematics

Fausto Uribe

Monica M. Valcourt

Nancy Sheccid Vargas Balderas

Derek J. Velez

Ashika Verma
Minor in Music

Eli Villa
Minor in Physics

Daniel C. Vuong
Also with a Major in Course XVIII
Minor in Economics

Ellen F. Wang

Emily Jiatong Wang
Minor in Comparative Media Studies

Handong Wang
Also with a Major in Course VIII
Minor in Mathematics

Ivy A. Wang
Also with a Major in Course XVIII
Minor in Design

Lilian Wang

Madeline Wang
Also with a Major in Course XVIII

Tony R. Ward
Minor in Business Analytics

Megan Jian Wei
Minor in Business Analytics

Anna E. Weinstein
Minor in Brain and Cognitive Sciences

Christian T. Williams

Edmund D. Williams, Jr.

Max Xavier Williamson
Minor in Public Policy

Shannon P. Wing

Benjamin David Wolz

Anna Jiayi Wong
Also with a Major in Course XVIII
Minor in Management

Elaine Y. Xiao

Timmy Xiao
Minor in Mathematics

Ari Xie
Minor in Writing

Katherine Xiong
Minor in Economics
Minor in Mathematics

Katherine Yang Xu
Minor in Mathematics
(February, 2022)

Michelle Yakubek
(February, 2022)

Forest Yang

Janice Catherine Yang

Tanya Yang

Yilinn Yang
Also with a Major in Course XV-2

Rui Yao
Also with a Major in Course XVIII

Derek Jia-Wen Yen
Also with a Major in Course XXIV-2
Minor in Mathematics

Richard A. York IV
Minor in Political Science

Joanne Yuan

Ann Zhang

Jerry Zhang
Minor in Statistics and Data Science
(See also M.Eng., Course VI-P)

Qianqia Zhang
Minor in Mathematics

Jason Y. Zhao

Tong Zhao
Minor in Mathematics

George Zheng

Jessica Amber Zheng
Minor in Mathematics

Winnie X. Zheng

Ye Cheng Zheng

Sophia Zhi
Minor in Linguistics

Elizabeth Y. Zou
Also with a Major in Course XVIII
(See also M.Eng., Course VI-P)

Bachelor of Science in Computer Science and Molecular Biology

Course VI-7

Department of Electrical Engineering and Computer Science in conjunction with the Schwarzman College of Computing

Miles Povich Agus

Tiwalayo Terrence-Luke Aina
Also with a Major in Course XVIII
(See also M.Eng., Course VI-7)

Elena Rosette Andree

Hieu Dinh
Also with a Major in Course V
Minor in Physics

Shulammite Eve Lim
Also with a Major in Course XXI-M

Stephen J. Lostetter III

Karthik Nair
(See also M.Eng., Course VI-7)

Samuel Toliver Eaton Nitz

Clinton S. Reid
Also with a Major in Course XVIII

Ailis Robinson
Minor in Japanese

Harveer Singh

Elaine Wu

Andrew G. Xue

Stephanie Xue Zhang
Also with a Major in Course XVII

Bachelor of Science in Computer Science, Economics, and Data Science

Course VI-14

Department of Electrical Engineering and Computer Science in conjunction with the Schwarzman College of Computing

Giovanni J. Ahern
Also with a Major in Course XVIII
Minor in Finance

Griffin Scott Ansel

Rikita Bansal
Minor in Business Analytics
Minor in Literature

Alain Roberto Berwa

Julia M. Caravias
Minor in Environment and Sustainability
Minor in Statistics and Data Science

Rachel Cheng
Also with a Major in Course XVIII
Minor in Business Analytics

Vijay Dey
Minor in Mathematics

Alexander C. Ellison

Danielle B. Fang

Xingchen Joy Feng
Also with a Major in Course XVIII
Minor in Music

Benjamin P. Gulak
(February, 2022)

William A. Jones
Also with a Major in Course XXI-L
Minor in Business Analytics

Deekshita Kacham
Minor in Women's and Gender Studies

Thatcher A. Kaspers

Ali Sinan Kaya
Minor in Business Analytics

Lara Linnea Ketonen
Minor in Business Analytics
Minor in Design

Andrew Rubin Masami Komo
Also with a Major in Course XVIII
(February, 2022)

Christopher J. McKinney

John H. Montinaro

Pranit Nanda
(February, 2022)

Thomas B. Ogeka
Minor in Statistics and Data Science

Orrie B. Page
Minor in Business Analytics

Joseph C. Powell

Ramon Jesse H. Roco, Jr.
Minor in Mathematics

Annika Eleanore Sougstad
Also with a Major in Course XV-2

Sarah R. Wertheimer

Wendy Dee Yin

Karina C. Zhang

Suki Zhang
Also with a Major in Course XV-2

Amber Zheng

Tianxin Zheng
Minor in Mathematics

Bachelor of Science in Chemical Engineering

Course X

Department of Chemical Engineering

Nicholas E. Aiello
Minor in Economics

Noah B. Brooks

Chloe Ann Ophelia Brown
Minor in Economics

Quan H. Do

Danica Dong
Minor in Design
Minor in Energy Studies

William Everett Exson
Minor in Business Analytics

Evan James Gwozdz
Minor in Management

Audrey R. Leibig
Minor in Environment and Sustainability

Ruoxin Lu
Minor in Chemistry
Minor in Writing

D'Ante L. McCollum

Nicole Marie Munné
Minor in Management

Alec M. Nguyen
Minor in Economics
Minor in Energy Studies

Alyssa M. Spencer
Minor in Chemistry

Ashleigh Nicole Teygong
Minor in Management

Chih Yu Tung
Minor in Energy Studies

William P. Woltmann
Minor in Biology

Bachelor of Science in Chemical-Biological Engineering
Course X-B
Department of Chemical Engineering

Juan A. Aleman

Spencer Patryck Delgado
Minor in Mathematics

Antonio E. Diaz
Minor in Biology

Isabella R. Gengaro
Minor in Computer Science

David E. Gomez

Mariss Haddad
(February, 2022)

Anna Alexis Johnson
Minor in Business Analytics
(February, 2022)

McKenzie Sampson McArthur
Minor in Biology
Minor in Writing
(February, 2022)

Jaclyn A. Ng
Also with a Major in Course VII

Britney Han Pham
Also with a Major in Course VII
(February, 2022)

Yvonne Rong
Also with a Major in Course VII

Jonathan Joseph Sandlin

Liliana C. Vela
Also with a Major in Course VII

Sydney M. Vleck
Also with a Major in Course VII
(February, 2022)

Bachelor of Science as recommended by the Department of Chemical Engineering
Course X-C
Department of Chemical Engineering

Kailyn M. Bryk
Also with a Major in Course XV-2
(February, 2022)

Bachelor of Science in Engineering as recommended by the Department of Chemical Engineering
Course X-ENG
Department of Chemical Engineering

Lina Atif Ahmed
Minor in Computer Science

Ayomikun Ayodeji
Also with a Major in Course XV-1

Jude Bonesteel
Minor in Energy Studies

Laura Chunying Chen
Minor in Public Policy

Shuxin Chen
Minor in Computer Science
(February, 2022)

Nicholas Philip Duchatellier
Minor in Economics

Tomás M. Herrera
Minor in Computer Science

Destinee-Jade Tsai Hung
Minor in Computer Science

Alexander H. Liu

Liew Min

Avery K. Nguyen
Also with a Major in Course XXI-L

Christine Marie Padalino
Also with a Major in Course XII

Natalia Perez-Lodeiro
Minor in Energy Studies

Paula F. Pieper
Minor in Statistics and Data Science

Naksha Roy
Minor in Management

Kelly Shuyao Wu

Ming Ying Yang
Also with a Major in Course VI-3
Minor in Economics

Bachelor of Science in Aerospace Engineering

Course XVI
Department of Aeronautics and Astronautics

María Paula Barbosa
Minor in Astronomy

Lindsey Catherine Bjornstad
Minor in Political Science

Jack J. Capper
Minor in Computer Science

Henri Conradt Champigneulle
(February, 2022)

Vittorio Colicci IV
Also with a Major in Course VIII
Minor in Earth, Atmospheric, and Planetary Sciences
Minor in Astronomy

Megan F. L. Cooper
Also with a Major in Course III-A

Sean G. Crozier
Minor in Literature

Lukas Z. Drexler-Bruce

Thomas S. Edelman

German A. Espinosa
Also with a Major in Course VI-2
Minor in Music

Charles Johannes Fenske

Wyatt M. Giroux

Carlos G. Hernandez
Also with a Major in Course VI-2
(February, 2022)

Alexander James Hodge
Minor in Music

Brian Hoon Hoh
Minor in Computer Science

Kevin James
Minor in Computer Science

Eun Young Jung
Minor in Computer Science

Jayaprakash Ding Yuan Fung Kambhampaty

William John Kuhl

Max K. Kwon

Alassia N. Lang
Minor in Japanese

Daniel Ledesma
Minor in Japanese

Erin M. Leydon

Cici Mao

Parker Mayhew

Bryan S. Medina

Amanda F. Olphie
(September, 2021)

John Michael Ped

Jacqueline E. Pedlow
Minor in Economics

Victor M. Perez-Ramirez

Joshua E. Rapoport

Matthew E. Schofield
Minor in Computer Science

Steven Serrano

Juliana R. Silldorff
Minor in Political Science

Ethan Sit

Jon K. Stenger
Minor in Computer Science

Delia Stokes Stephens
(See also S.M., Course XVI)

Michelle S. Tang

Isabella S. Torres
Also with a Major in Course XV-1
Minor in Spanish

David Dezell Turner

Herbert M. Turner IV
Also with a Major in Course VI-2

Tara Kamala Venkatadri
Minor in Earth, Atmospheric, and Planetary Sciences

Catherine L. Washburn
(February, 2022)

Tyler Chase Worthley
Minor in Economics

Azreen Zaman
Also with a Major in Course VI-2
Minor in Economics

Maggie Zheng

Bachelor of Science in Engineering as recommended by the Department of Aeronautics and Astronautics

Course XVI-ENG
Department of Aeronautics and Astronautics

Juliana L. Chew
Also with a Major in Course VI-2

Elissa Akusika Gibson
Also with a Major in Course IX

Dylan F. Goff
Minor in Earth, Atmospheric, and Planetary Sciences

Jared L. Hensley
Minor in Computer Science

Devin Johnson
Minor in Physics

Anika A. Kamath

Alexander P. Koenig
Also with a Major in Course VIII
(February, 2022)

Katherine Kutina
Minor in Brain and Cognitive Sciences

Abdulazeez Mohammed Salim
Also with a Major in Course VIII

Savva Morozov

Kaila Guarda Pfrang
Minor in Public Policy

Karolina Weronika Podsada

Bachelor of Science in Biological Engineering

Course XX
Department of Biological Engineering

Sarah Wonboon Acolatse

Lainie W. Beauchemin

Imane Bouzit

Laura E. S. B. Chen
Minor in History

Prem Chintalapudi
Also with a Major in Course VI-3
(February, 2022)

Kaden S. DiMarco

Desmond Livingston Edwards, Jr
Also with a Major in Course VII
Minor in French

Erinn L. Fagan
Also with a Major in Course IX

Kylie Jane Gallagher

Jenny Gao
Minor in Applied International Studies

Diana L. Garibay

Malik Aaron George
Minor in African and African Diaspora Studies

Miles Avery George
Minor in African and African Diaspora Studies

Karenna Jade Groff
Minor in Brain and Cognitive Sciences

Dana L. Haig

Emily L. Han

Hannah Joy Harens
Minor in Statistics and Data Science

Nicole Rose Haseley

Camellia Huang

Maile Marie Yu Liang Jim

Devin T. King-Roberts

Jessica R. Knapp

Olivia Rose Lucchese

Oyuntugs Luubaatar

Kevin S. Ly
Also with a Major in Course VI-2
Minor in Mechanical Engineering

Michael Vincent Mandanas
Minor in Computer Science

Anais Victoria Marenco

Abigail Mauermann
Minor in Biology

Carlos F. Mercado-Lara
Also with a Major in Course XV-1

Ilana Sandra Nazari
Minor in Spanish

Sharon Chidinma Opara-Ndudu
Minor in Political Science

Joshua J. Park

Giramnah Sofía Peña-Alcántara

Alexandra Jeena Poret
Minor in Science, Technology, and Society

Diana C. Renteria

Haniyah Shareef

Juliana M. Strother
Minor in Brain and Cognitive Sciences

Allison Y. Tong
Minor in Computer Science

Brian A. Williams

Heekyoung Woo
(February, 2022)

Melody Wu
Minor in Environment and Sustainability
Minor in Design

Eleanor Lee Xiao

Michelle Yin
Minor in Computer Science

Linda A. Yu

Chelsea Jiaruo Zhang
Minor in Women's and Gender Studies

Wen Ting Zheng

Bachelor of Science in Nuclear Science and Engineering

Course XXII
Department of Nuclear Science and Engineering

Liam S. Hines
Also with a Major in Course XXIV-1

Joseph W. Jerkins
Also with a Major in Course VIII
(February, 2022)

Peninah Lise Levine
Minor in Public Policy
(See also S.M., Course XXII)

Bachelor of Science in Engineering as recommended by the Department of Nuclear Science and Engineering
Course XXII-ENG
Department of Nuclear Science and Engineering

Amelia J. Cavallaro
Minor in Computer Science

Jovier Alejandro Jiménez
Minor in Economics
Minor in Energy Studies

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES

Bachelor of Science in Economics
Course XIV-1
Department of Economics

Bevan Anthony Gordon Pereira

Liam R. Miller
Minor in Mathematics

Chase A. Reid

Lauren Elizabeth Rice

Luke R. Stewart
Minor in Mathematics

Bachelor of Science in Mathematical Economics
Course XIV-2
Department of Economics

Prosser M. Cathey
Also with a Major in Course XVII
Minor in Management

Lucy Ayres McMillan
Minor in Environment and Sustainability
Minor in Public Policy

Ashley Ann Thomas
(February, 2022)

Hanna Alexa Tuomi
Minor in Mechanical Engineering
Minor in Design

Bachelor of Science in Political Science
Course XVII
Department of Political Science

Zachary Daniel Alfaro
Also with a Major in Course XV-3

Yuxin Chen

Roy H. Kwon
Minor in Science, Technology, and Society

Bachelor of Science in Music
Course XXI-M
Music and Theater Arts

Anna Baiba Aldins
Minor in Mathematics
Minor in Ancient and Medieval Studies

Eva A. Demsky
Also with a Major in Course XIV-2

Katherine E. Karwoski
Also with a Major in Course IX

Bachelor of Science in Music and Theater Arts
Music and Theater Arts

Peter Anthony Tone
Also with a Major in Course VI-3

Bachelor of Science in Humanities and Engineering
Course XXI-E
Department of Humanities

Jonah A. Baskerville

Preston Bezos

Yiqing He
(February, 2022)

Hayley Ye
Minor in Design

Bachelor of Science in Humanities and Science
Course XXI-S
Department of Humanities

Amira Casaclang Beck

Madeline Ferrari Holtz

Sarah Bingham Knopf

Tanya M. Llanas

Bachelor of Science in Linguistics and Philosophy
Course XXIV-2
Department of Linguistics and Philosophy

Kristy M. Chang

Theodor Cucu
Also with a Major in Course VI-9

Rujul Gandhi
Also with a Major in Course VI-2

Bachelor of Science in Comparative Media Studies
Program in Comparative Media Studies

Andi L. Mitchell

Miriam G. Suarez

AudreyRose Ramona Wooden

SLOAN SCHOOL OF MANAGEMENT

Bachelor of Science in Management
Course XV-1
Sloan School of Management

Gavin M. Fischer
Minor in Computer Science

Ian J. Hinkley
Also with a Major in Course II-A
Minor in Anthropology

Shelli Orzach
Also with a Major in Course XVIII
Minor in Environment and Sustainability

Christine M. Sanchez
Also with a Major in Course VI-14

Sajjad A. Zaheer
(February, 2022)

Elizabeth Abby Zhou
Also with a Major in Course VI-3
(September, 2021)

Jenny Zhu
Also with a Major in Course VI-14
Minor in Entrepreneurship & Innovation

Bachelor of Science in Business Analytics
Course XV-2
Sloan School of Management

Tevita Asilolohea Akau
Minor in Computer Science

Giulia Alvarenga
Minor in Computer Science

Christina Elizabeth Antonakakis
Also with a Major in Course VI-14

Brian S. Glat
Also with a Major in Course XVIII

Julia Elena Gonzalez Fernald
Also with a Major in Course XI

Adam M. Katz

Aaron Lu
Also with a Major in Course VI-14
Minor in Mathematics

Valeria N. Martin Del Campo
(February, 2022)

Sarah Anne Moseson
Minor in Urban Studies and Planning
(February, 2022)

Peter J. Novoa
Also with a Major in Course VI-14

Munachimso C. Nwana

Johnvir S. Pangli

Audrey Wohl Pettigrew
Also with a Major in Course VI-14

Mia Reilly

Roland Rocafort Fernández
Also with a Major in Course VI-14
Minor in Mathematics

Margaret Elizabeth Rodriguez
Also with a Major in Course VI-14

John D. Steele
Minor in Computer Science

Eileen I. Tan-Aristy
Minor in Computer Science

Lydia Yu
Also with a Major in Course VI-14

Bachelor of Science in Finance
Course XV-3
Sloan School of Management

William Wei-En Chang
Also with a Major in Course VI-14

Alexander D. Hom
Also with a Major in Course VI-14

Keith B. Lamp
Also with a Major in Course XVIII

Diana Ma

Maya Reyes

Gabriela I. Rodriguez

James Thomas Santoro

Sebastian Simon
Also with a Major in Course XIV-2

Ryan Suh
Minor in Japanese
Minor in Computer Science

Jennifer Yu
Minor in Economics

SCHOOL OF SCIENCE

Bachelor of Science in Chemistry
Course V
Department of Chemistry

Zachary E. Chin
Also with a Major in Course VI-2
Minor in Music

Yutong Dai
Also with a Major in Course VI-7
(February, 2022)

Rondel S. Garguilo

Peter Garrett Hegel
Minor in Computer Science

Ruby Anise Kharod
Minor in Science, Technology, and Society

Jiwon Michelle Lee
Minor in Biology
Minor in Public Policy

Alex Jie Li

Xochitl Luna
Minor in Brain and Cognitive Sciences

Omar A. Santiago Reyes
Minor in Biology
Minor in Music

Abigail Kamila Dawn-Marie Scott

Bachelor of Science in Chemistry and Biology
Course V-7
Department of Chemistry

Aniket Dehadrai
Minor in Theater Arts

Leyna Duong
Minor in Writing

Laney R. Flanagan

Hannah R. Grupe

Marina Grace Monsivais

Mydia Diep Phan
Also with a Major in Course IX

Shannon Yuanling Weng
Minor in Physics
(February, 2022)

Bachelor of Science in Biology
Course VII
Department of Biology

Titash Biswas
Minor in Brain and Cognitive Sciences
Minor in Science, Technology, and Society

Eduardo A. Canto

Silvia Seoyeon Cho
Also with a Major in Course IX

Michelle Junyi He
Also with a Major in Course IX
Minor in Applied International Studies

Alexandra Fallon Hoffman

Jonas Kantola

Heya Lee

Soo Min Lee
(February, 2022)

Sarah C. Lincoln
Also with a Major in Course XXI

Isha Mehrotra

Adesefeoise Michael Oriaifo
(February, 2022)

Vaishnavi V. Phadnis

Rachel Min Shen
Minor in Earth, Atmospheric, and Planetary Sciences

Sofía Isabel Torres Bigio

Max Yaeil von Franqué
Also with a Major in Course XI

Zhishan Wang
Minor in French

Jason Yang
Minor in Computer Science

Daniel D. Zhang
Minor in Comparative Media Studies

Bachelor of Science in Physics
Course VIII
Department of Physics

Brendan Michael Ashworth
Also with a Major in Course VI-9
(February, 2022)

Elliott M. Barnhill
Also with a Major in Course XXI-L

Mason G. Bishop

Quinn Nicole Brodsky
Also with a Major in Course XVIII
Minor in Writing

Kiara T. Carloni
Minor in Mathematics
Minor in Literature

Grecia Castelazo
Also with a Major in Course VI-2
Minor in Mathematics

Chang-Han Chen
Also with a Major in Course XVIII

Shiqi Chen
Also with a Major in Course VI-2

Sabrina Y. Cheng
Minor in Computer Science

Diego Colín
Minor in Urban Studies and Planning

Sean Condon
Minor in Computer Science
(February, 2022)

William P. Cuozzo
Also with a Major in Course VI-14
Minor in Mathematics
Minor in Business Analytics

Kylie Yui Dan
Minor in Astronomy
Minor in Japanese

John Theodore Dinsmore
Minor in Mathematics
Minor in Astronomy

Luke C. Gianni
(February, 2022)

Max R. Hardy
Also with a Major in Course VI-1
Minor in Materials Science and Engineering

Sihao Huang
Also with a Major in Course VI-1
Minor in Political Science

Nory G. Klop-Packel

Serhii Kryhin

Jesus E. Lares
Also with a Major in Course VI-3

Keiran James Lewellen
Also with a Major in Course XVIII

Chih-Wei Joshua Liu

Keith Gerard Mokry
Minor in Computer Science

Manuel Morales
Also with a Major in Course VI-1
Minor in Energy Studies

Karna Ashwin Morey

Quynh The Nguyen
Also with a Major in Course VI-3
Minor in Mathematics

Mikael Girma Nida
Also with a Major in Course VI-3

Mofeyifoluwa O. Oluwalana
Also with a Major in Course VI-2

Alex F. Pacheco

Ava Alexandra Baer Pettit

Maya L. Reese
(February, 2022)

Elena A. Romashkova
Also with a Major in Course XII

Lulu Danger Russell

Yoshihiro Saito
Minor in Mathematics
Minor in Computer Science

Eve Lockhart Schoen

Devin Jon Seyler
Also with a Major in Course XVIII
Minor in Energy Studies

John Shackleton
Also with a Major in Course VI-3

Bereket Z. Sintayehu

Alexander W. Smith
Minor in Chemistry

Alexandra R. Stewart

Michal Szurek
Also with a Major in Course VI-1

Joshua R. Talbot
Also with a Major in Course VI-2
Minor in Mathematics
(February, 2022)

Octavio J. Vega
Also with a Major in Course XVIII
Minor in Public Policy

Rokas Paul Veitas
Also with a Major in Course XVIII

Cindy Wang
Also with a Major in Course VI-3

Raymond A. Wynne
Also with a Major in Course VI-1
Minor in Mathematics

YuQing Xie
Also with a Major in Course XVIII-C

Hao Bang Yang
Also with a Major in Course VI-3

Muye Yang
Also with a Major in Course XVIII-C
Minor in Statistics and Data Science

Yuan-Chen Yeh
Also with a Major in Course XVIII

Bachelor of Science in Brain and Cognitive Sciences

Course IX
Department of Brain and Cognitive Sciences

Chelsea Chinyere Ajunwa

Maggie Chen
(February, 2022)

Aidan Cook
Minor in Theater Arts

Erick J. Eguia
Minor in Biology

Kristine Marie Hocker

Alana Nicole Kalehua
Minor in Biology

Ravi Kapoor

Rucha Atul Kelkar
(February, 2022)

Dana Marie McCormack

Keith Michael Skaggs
Minor in Biology

Kareena L. Villalobos
Minor in Writing

Yizhi Wang
Minor in Theater Arts

Anna Laura Wilson

Bachelor of Science in Computation and Cognition

Course VI-9

Department of Brain and Cognitive Sciences in conjunction with the Schwarzman College of Computing

Tyler H. Allen

Annalisa Justine Broski

Hannah T. Collins

Sophia Emmanuelle Diggs-Galligan

Cesar I. Duran

Benjamin Dwyer

Emelie Ann Eldracher
Minor in Management

Mohanned M. Elkholy

Caleb M. Harris

Alisa Y. Hathaway
Minor in Mechanical Engineering

Doron Hazan
Also with a Major in Course XV-2
(February, 2022)

Annika L. Heuser
(February, 2022)

Ashley K. Holton

Emily Huang
Minor in Writing

Michelle S. Hung

Bhav Jain

Joanna Sarah Kennedy
Minor in Biomedical Engineering
Minor in Science, Technology, and Society

Faduma Bashir Khalif
Minor in Mathematics

Isaac Kyle Lau
(February, 2022)

Robert Cheukying Law
Minor in Music

Vinh Phúc Lê

Noah Hye-Jae Lee
(February, 2022)

Griffin S. Leonard

Mason T. Lykes

Elian Malkin
Minor in Mechanical Engineering

Keith Thomas Murray
Also with a Major in Course XXIV-2

Haylee J. Niemann

Uche O. Okwo

Eileen Pan

Nikasha G. Patel

Mariela M. Perez-Cabarcas
Minor in Russian and Eurasian Studies

Habeeb Ayodeji Salau

Luyao Tian
Minor in Design

Aniekan M. Umoren

Olivia G. Valle

Lily Wang
Also with a Major in Course XV-1

Brody West

Bachelor of Science in Earth, Atmospheric, and Planetary Sciences

Course XII

Department of Earth, Atmospheric, and Planetary Sciences

Juliana Kristine Drozd

Lin Hou
Also with a Major in Course VII

Zoe Levitt
Minor in Mathematics
Minor in Music

Lily N. Zhang
Also with a Major in Course VIII
Minor in Public Policy

Bachelor of Science in Mathematics

Course XVIII

Department of Mathematics

Sualeh Asif
Also with a Major in Course VI-3
Minor in Theater Arts

Dina Atia
Also with a Major in Course VI-14
Minor in Philosophy

Nicholas Shiao Baginski
Also with a Major in Course VI-14

Daniel C. Barnett
Also with a Major in Course VI-3
Minor in Economics

Scott C. Becker
Also with a Major in Course VI-3
(See also M.Eng., Course VI-P)

Scott E. Belair
Also with a Major in Course XV-2

Elisabeth Daniella Bullock

Yiran Cai
Also with a Major in Course VI-3

Andrea Ck Chan
Minor in Economics
(February, 2022)

Ashley Chen
Also with a Major in Course VI-3

Jason Chen
Also with a Major in Course VI-3

Kelly Judy Chen
Also with a Major in Course V

Kenny Chen
Minor in Physics
Minor in Japanese

Jung Soo V. Chu
Also with a Major in Course VI-3

Sophia L. Cohen
Also with a Major in Course XXI-W
(February, 2022)

Preston Cranford

Jonah M. Darnel
(February, 2022)

David W. Darrow
Minor in German

Daniel G. Edelman
Also with a Major in Course VI-3

Elias Theodore Garcia

Swapnil Garg
Also with a Major in Course VIII
Minor in Biology
Minor in Computer Science

Elley M. Goldberg
Minor in Economics

Andrew Gu
Also with a Major in Course VI-3

David He
Also with a Major in Course VI-3

Alexandra A. Hoey
Minor in Computer Science

Letong Hong
Also with a Major in Course VIII

Brian R. Huang
Also with a Major in Course VI-3

Nabil Khalil
Also with a Major in Course XXI-M
Minor in Physics
Minor in Finance
(February, 2022)

Robert Koirala B.K.
Also with a Major in Course VIII

Junhee Lee
Also with a Major in Course VI-3
Minor in Music

Madeleine Kaiyuan Li

Wanlin Li
Also with a Major in Course VI-3
(See also M.Eng., Course VI-P)

Ian J. Limarta
Also with a Major in Course VI-3

Andrew Y. Lin
Also with a Major in Course VIII
Minor in Music

James H. Lin
Also with a Major in Course VI-3

Daniel S. Liu
Also with a Major in Course VI-2
Minor in Music

William Henry Francis Ludington

Arvid Lunnemark
Also with a Major in Course VI-3

Joy Yan Ma
Minor in Economics

Michael Yuanchao Ma

Annah Aureliea Grace Mercer

William K. Nash
Also with a Major in Course VI-3

Hesham Nawaz
Also with a Major in Course VI-14

Anders Olsen
Also with a Major in Course VI-3

Justin S. Park
Minor in Physics
Minor in Computer Science

Alan E. Peng
Minor in Music

Dylan G. Pentland

Mario A. Pereira

Maximilian Porlein
Also with a Major in Course VI-14

Hugo Ernesto Ramirez, Jr.
Also with a Major in Course VI-3

Kevin K. Ren
Also with a Major in Course VIII
(February, 2022)

Michael Ren
Also with a Major in Course VI-3

René David Reyes Bardales
Also with a Major in Course VI-3

Ana Paola Reyes Sánchez
Also with a Major in Course XXIV-1

Hayden MacKenzie Rome
Also with a Major in Course VI-3

Isabel Sarah Hokuao Rosa
Also with a Major in Course VI-3
Minor in Spanish
Minor in Statistics and Data Science
(February, 2022)

Peter Niiler Rowley
Also with a Major in Course VI-3

Amber Z. Shen

Veronika Silkin

Mihir Anand Singhal
Also with a Major in Course VI-3

Edwin Cheng Song
Also with a Major in Course XIV-1

Emerson Gabriel Studt
(September, 2021)

Megan Su
Also with a Major in Course VI-3

Abram Lucas Turner
(February, 2022)

Amanda Isabel Vanegas Ledesma
Also with a Major in Course XII

Collin Robert Warner
Also with a Major in Course VI-3

Xunjing Wei

Catherine W. Wu
Also with a Major in Course VI-3

David Xing Wu
Also with a Major in Course VI-3

Wanyi Xiao
Also with a Major in Course VI-2

Grace Xiong
Minor in Finance
Minor in Music

Guanpeng A. Xu
Also with a Major in Course VI-3

Torridon D. Yearwood
(February, 2022)

Joshua Yoon
Also with a Major in Course VI-14

Leah Sullivan Yost
Also with a Major in Course XXI-W

Jeffery Yu
Also with a Major in Course VIII
Minor in Music
Minor in Computer Science

Shengtong Zhang
Also with a Major in Course VI-3
Minor in Economics

Grace Y. Zheng
Also with a Major in Course XV-2
Minor in Computer Science

Bachelor of Science in Mathematics with Computer Science

Course XVIII-C
Department of Mathematics

Fiyifolu Olufemi Han Adebekun

Ifeoluwapo Imammachukwu Ademolu-Odeneye

Aruzhan Amanbayeva

Andrea Arias
Minor in Women's and Gender Studies

Julia Balla
Minor in Economics

Azariah Z. Beyene

Casey Spencer Bussone

Kyri H. Chen
Minor in Economics

Shardul Chiplunkar

Briana A. Douglas

Brin Catherine Harper
Also with a Major in Course XXIV-1
(February, 2022)

Michelle Y. He
Minor in Finance

Linda Huang

Megan Joshi

Terry T. Kang

Jabari A. King
(September, 2021)

Michelle Li

Hannah Liu
Minor in Chinese
(February, 2022)

Melissa Mu

Willis Y. Ong

Omomayowa Songonuga
Minor in Design

Alice Anran Zhang
Also with a Major in Course XXIV-1

Cindy Y. Zhang

Kathryn Zhao
Also with a Major in Course XV-1

SCHOOL OF ARCHITECTURE AND PLANNING

Master of Architecture
Course IV
Department of Architecture

Ana Paula Arenas
(February, 2022)
A Taste of Home (with C.-A. Rodrigues)

Taylor Lynn Boes
(February, 2022)
The Incomplete Domestic Landscape (with F. Ma)

Jonathon Glyn Brearley
(See also S.M.Building Tech., Course IV)
Taming Torridity: New Housing Forms for Heat Resilience

Ryan Clark Clement
(February, 2022)
Bernini Started It (with C. Matthai)

Ginevra D'Agostino
(February, 2022)
Rebuilding the Edge: The Case of the Sulmona-Carpinone Railway and the Town of Pettorano sul Gizio

Angelica Marie Door
(February, 2022)
Fourth Dimension

Hugh Timothy Ebdy
The Renovation of East Campus: Control and Culture

Nare Filiposyan
(February, 2022)
(Re)Turn to Stone

Daniel Griffin
(February, 2022)
Seeing Labor (with I. Ow Su Wei)

Ji Ye Ha
(See also S.M., Real Estate Development)
Co-Working in Seoul: Integrating Public Infrastructure into the Metaverse

Emma Jane Eileen Jurczynski
(February, 2022)
Who Cares? Assemblies of Care-and-Repair

Katharine Amelia Kettner
(See also M.C.P., Course XI)
Inheritance Geographies: Black Presence and the Making of London

En-Han Thaddeus Lee
2.5D: An Exploration of Hybrid 3D Printing on Fabric

Florence Luyao Ma
(February, 2022)
The Incomplete Domestic Landscape (with T. Boes)

Charlotte Rose Matthai
(February, 2022)
Bernini Started It (with R. Clement)

Ana Alice McIntosh
(February, 2022)
Inhabiting Wetness

Christopher Masahiko Moyer
(See also M.C.P., Course XI)
Expanding Architectures of Sharing: Public Housing Authority-Supported Middle-Income Limited-Equity Cooperatives

Ruth Blair Moyers
(February, 2022)
Accurate-ish

Inez Ow Su Wei
(February, 2022)
Seeing Labor (with D. Griffin)

Carol-Anne Veronica Rodrigues
(February, 2022)
A Taste of Home (with A. Arenas)

Jia Li Song
(February, 2022)
Speculative Friction: Seven Stories from the Geneva Freeport (with Y. Yacoby)

Yutan Sun
(February, 2022)
Pronounced Absurdity: The Wedding-scape Outside a Conical Field

Gil Schwimmer Sunshine
(February, 2022)
Medium Resolution

Jitske Swagemakers
(February, 2022)
Forest Framing

Carolyn Tam
(February, 2022)
The Third Teacher : Architecture as Enabler of Active Learning

Evellyn Tan
(February, 2022)
Tsunami Bosai

Ellen Wood
(February, 2022)
Under (De)Construction

Jie Wu
(February, 2022)
Specious Materials (with Z. Xu)

Zhicheng Xu
(February, 2022)
Coping with Neighbors and Other Entanglements

Zhifei Xu
(February, 2022)
Specious Materials (with J. Wu)

Yaara Yacoby
(February, 2022)
Speculative Friction: Seven Stories from the Geneva Freeport (with J.L. Song)

Mengqiao Zhao
(February, 2022)
Fukushima Exclusion Zone Survival Handbook

Master of Science in Architecture Studies
Course IV
Department of Architecture

Maryam Aljomairi Alhajri
Self-Shaping Mechanisms: Prototyping of PneuKnit Systems

Feiyue Chen
(February, 2022)
Symbols and Spatiality of Social Media: Re-Constructing the Digital Public Realm

Joel Austin Cunningham
As the Curtain Falls

Gabriela Degetau Zanders
The Afterlife of Wells, from Oil to Soil in the Amazonia

Mariam E. Elnozahy
Visualizing Oil in Aramco World Magazine: Public Relations and Corporate Photography from 1949-1960

Kiley Anne Feickert
Thin Shell Foundations: Embodied Carbon Reduction through Materially Efficient Geometry

Aidan Flynn
(September, 2021)
Surveilling Sin: Locating Sodomy in the Early Modern Florentine Bathhouse

Laura Maria Gonzalez
Beyond the Brick: Collaborations with a Sensing Microbial System in the Built Environment

James Heard
"Professionals in a Soviet America": Federal Housing Policy, the Popular Front, and Architects in Los Angeles, 1919–1947

Shakeel Hossain
(February, 2022)

Eakapob Huangthanapan
(September, 2021)
Mediating Chana: Seeding Synergies between Doves and Development

Ryuhei Ichikura
(September, 2021)
Mokumitsu Districts in Tokyo

Kimball Regli Kaiser
Parts-In-Progress

Wonki Kang
(February, 2022)
(See also S.M., Course VI)
Sonic Hypermirror: Attuning to Hyperobjects

Xuan Lan
China's Community Riders: Digital Labor, Delivery Logistics and Spaces

Yuxuan Lei
(See also S.M., Course VI)
A Virtual Reality Rehabilitation Interface with Augmented Sensing, Interaction, and Visualization Techniques

Kuang-Chun Lo
Duality of Ground: Re-Envisioning Space of Death in New York City (with J. Prachasartta)

Muhammad Hasan Nisar
An Experiment in Piety: The Three Domed Suhrawardy Tombs at Uchch Sharif

Eleni Styliani Oikonomaki
(See also S.M., Course VI)
Soundscapes as Urban Transformation: Introducing a Notational Language that Represents the Shifting Relationships Between Sound, Space, and Movement

Olivia Paraiso de Campos Serra
(September, 2021)
Seedling: Reconciling Social Housing and Access to Urbanity in Rio de Janeiro

Jariyaporn Prachasartta
Duality of Ground: Re-Envisioning Space of Death in New York City (with K.-C. Lo)

Lasse Rau
On Viscous Grounds: Planning for Friction across the Trans-Alaska Pipeline, 1968-1981

Myles Boykins Sampson III
Discrete-to-Complete: The Fundamentals of Design Directed Robotics

Siyuan Sheng
(September, 2021)
Made in Rural China --The Analysis and Redesign of the Urbanization Trajectory for E-Commerce Villages in Rural China

Meriam Soltan
Motivated Fictionality: Worldbuilding and The Thousand and One Nights

Qianqian Wan
(September, 2021)
Generative Urbanism toward Thermal Synergy: Sustainable Urban Design for District Heating and Cooling

Ngai Hang Wu
Patterns of Moments - Reasoning about Space Video via Pattern Language of Human Behavior by Extracting Multi-Action Activities via Machine Learning Video

Qianyue Xu
"Scraping and Bloodletting": Xiamen Dada and the Self-Renewing System of Reform-Era Art

Master of Science in Art, Culture and Technology
Course IV
Department of Architecture

Pohao Chi
(September, 2021)
Synchronizing Glitches as Internetworked Entities

Weihan Jiang
Imagined Common Ground: Rethinking on Language, Translation and Technology

Kwan Yee Queenie Li
Hope-Hopping

Jesus Ocampo Aguilar
(September, 2021)
How to Never Walk in a Straight Line Again: A Methodology to Stop Making Sense.

Faruk Sabanovic
Expanded Cinema and War; Trauma in Hyper-Documented Age

Aarti Sunder
(September, 2021)
A Location in Parts

Master of Science in Building Technology
Course IV
Department of Architecture

Jonathon Glyn Brearley
(See also M. Arch., Course IV)
Taming Torridity: New Housing Forms for Heat Resilience

Yuan Cai
(February, 2022)
(See also S.M., Course VI)
Simulation- and Experiment-Based Setpoint Control for Heating, Ventilation, and Air-Conditioning Systems: A Single- and Multi-Objective Optimization Problem

Jingyi Liu
(September, 2021)
Early Design Stage Building Lifecycle Analysis (LCA) of Cost & Carbon Impact

Master in City Planning

Course XI
Department of Urban Studies and Planning

Britani Nicole Allen
Cultivating Capacity in the Northeast's Native Seed and Plant Supply Chain

Fiorella Belli Ferro
(September, 2021)
Public Housing, Private Priorities: The Invisible Dynamics in Low-Income Housing Allocation in Urban Peru, the Case of CSP-Techo Propio (with M. Orensanz)

Lauren Elspeth Craik
(See also S.M., Transportation)
Congestion Pricing: Moving from Equity Analysis to Transportation Justice

Miguel Ángel Dávila Uzcátegui
An Engagement Toolkit to Center Unhoused Stakeholders in the Design and Programming of Open Space

Somala Marseau Diby
(September, 2021)
Narrating the Politics of Urban Development in "New Era" Boston

Neha Jayesh Doshi
(February, 2022)
An Economic Development Practitioner's Guide to Childcare

Ehab A. Ebeid
(See also S.M., Transportation)
The Invisible Hand or the Handgun: Ride Hailing, Violence, and Political Settlements in the South African Urban Mobility Market

John Thomas Fay, Jr.
(September, 2021)
Housing for Whom: Does Adherence to Massachusetts' 40B Provide Adequate Stock of Housing Types Needed at the Local Level?

Alexander Paine Gant
(September, 2021)
Leveraging the US Army Corps of Engineers Civil Works Public-Private Partnerships (P3) Pilot Program to Promote Equitable Outcomes from Local Climate Mitigation and Adaptation Projects

César Giovanni García López
(Re)envisioning Land and Power: The Fight for Community Ownership + Control in Massachusetts

Andrea Daniela Grimaldi
(September, 2021)
Envisioning Lower Allston's Future: Contested Spaces at the Margins of Harvard University's Expansion

Lamice Halaby
Can Urban Gardening be a Case for Neighborhood Infrastructure Reparation The Case for Cambridge, Massachusetts

Ava Rose Hoffman
(September, 2021)
Commoning the Public: Federal Land as a Site of Housing Struggle in Rio de Janeiro

Meital Hadassa Hoffman
Undead Bed: Mattress Recycling in Boston

Rajan Jorden Hoyle
REMEMORY: Territorial Justice in Both Americas

Adriana Maria Jacobsen
(September, 2021)
Designing Public Transit at the Margins: How Rethinking Public Transit in Boston to Support the Travel Patterns of Transit-Reliant Women Could Transform Public Transportation for the Better

Rhett Marville James
(September, 2021)
StreetSmart: Reinventing Retail through Smarter Small Business

Aiyah Josiah-Faeduwor
(February, 2022)
Re-collective Revolution: A Reclamation of Black Self-Subsistent Economic Tradition

Katharine Amelia Kettner
(See also M. Arch., Course IV)
Inheritance Geographies: Black Presence and the Making of London

Poun Laura Kim
(September, 2021)
Brooklyn of Korea: Place Branding as a Process in Production of Space

Allison Hannah Lee
(February, 2022)
From Rural Ground to Rural Grocery: Designing a Local Food Value Chain

Jasmine Marie Martin
(September, 2021)
Neighborhood Mutual Aid Groups and Spaces of Deviant Care

Maria de los Angeles Martinez Cuba
(September, 2021)
Measuring Spatial and Social Interdependencies between Public Schools and the Community: City of Cambridge

Danielle Evelyn-Olivia Moore
One Size Does Not Fit All: Individualizing Climate Action Plans in Southern California

Maria Lucia Morelli
(September, 2021)
The Right to Navigate Risk in Mexico City: Possibilities for Creating Safer Spaces for Women Experiencing Fear of Sexual Harassment in Their Daily Use of the City

Christopher Masahiko Moyer
(See also M. Arch., Course IV)
Expanding Architectures of Sharing: Public Housing Authority-Supported Middle-Income Limited-Equity Cooperatives

Mora Orensanz
(September, 2021)
Public Housing, Private Priorities: The Invisible Dynamics in Low-Income Housing Allocation in Urban Peru, the Case of CSP-Techo Propio (with F. Belli Ferro)

Jordan Victor Owen
(See also S.M., Real Estate Development)
Data Driven Transit Oriented Development Planning: Using with Montreal's New Transit System as a Case Study

Andrey Prigov
Making a Neighborhood Illegal: Zoning, Nimbyism, and Housing Justice in Bensonhurst, Brooklyn

Maria Camila Ramos Yanez
(September, 2021)
Understanding Subway Vibrancy in Live-Work-Play: A Case Study from and for Santiago, Chile

Tyler Luis Rivera
"No One Washes a Rental Car": Parsing Contested Narratives of Worker Ownership in the Massachusetts Cooperative Economy

Anna Maureen Schuessler
The Unintended Inevitable: How Housing Fell through the Cracks in Venice Beach's Transition to Community Planning, and What It Might Take to Build an Imagination for the Future

Kevin Kaiwen Shi
Resilience and Its Discontents: Risk, Temporality, and a Climate Change Crisis

Stephanie Julia Silva
Down Then Out: Basement Apartments and Housing Insecurity in the Face of Flood Risks

Asher Harrison Burk Simon
The War on Who? An Analysis of Drug Possession Arrests in Four U.S. Cities

Christian Joseph Eugene Turner
(February, 2022)
People-Centered Planning: A Case Study in Virtual Participatory Design with Chicago Residents

Matias Williams
(September, 2021)
Measuring the COVID-19 Shock from Outer Space: Local Economic Vibrancy in 15 Global Cities

Prathito Andy Wisambodhi
(September, 2021)
Pushcarts to Platforms: Measuring Food Delivery Apps' Effect on Street Vendors' Location Preferences in the Global South. Case Study: Surakarta, Indonesia

Master of Science in Urban Studies and Planning

Course XI
Department of Urban Studies and Planning

Klo'e Yim Chew Ng
(September, 2021)
Walking to Transit - Using Big Data to Analyze Bus and Train Ridership in Los Angeles.

Master of Science in Media Arts and Sciences

Program in Media Arts and Sciences

Mariah J. Avila
(September, 2021)
Methods for CRISPR Cas12a Multiplexing in Mammalian Systems

Guadalupe Babío Fernández
(September, 2021)
Nuclear, A Climate Opportunity

Ayush Chopra
Decision Making for Populations

Justin Browning Christensen
(September, 2021)
Distributed Displays for Discrete Integrated Circuit Electronics

Daniella E. DiPaola
(September, 2021)
Children as Spectators, Actors, and Producers: Understanding the Impact of Knowledge and Agency on Child-Robot Relationships

Jack Anderson Forman
(September, 2021)
DefeXtiles: 3D Printed Quasi-Woven Textiles via Underextrusion

Zachary Peter Fredin
(September, 2021)
Assembling Integrated Electronics

Lily Elizabeth Gabaree
(September, 2021)
Agency and Community: Supporting Creative Learning in a Global Online Course

Alice Hong
(September, 2021)
KnitheWorld: lines_of_code_as_loops_of_yarn

Xi Hua
(February, 2022)
Plantable Maps

Aaron M. Jaeger
(September, 2021)
Design of an Automated Fiber Placement Machine to Build Prosthetic Sockets

Wonjune Kang
Speaker Anonymization using End-to-End Zero-Shot Voice Conversion

Zhipeng Liang
(September, 2021)
Membrane I/O : Designing Bits and Atoms for Tangible Telepresence

Hannah R. Lienhard
(September, 2021)
Squishy Music Toys: Creating a Less Stressful, More Pliable Way to Enter the Music World

Fangzheng Liu
(September, 2021)
LunarWSN: A Wireless Sensor Network for In-Situ Lunar Water Ice Detection

Nina M. Lutz
(September, 2021)
A Counting for Silence

Christina Isabella Zeilberger Meyer
(September, 2021)
Design and Efficacy of a Variable Thickness Transtibial Prosthetic Liner

Manaswi Mishra
(September, 2021)
Living, Singing A.I. : An Evolving, Intelligent, Scalable Composition System

Aarón Montoya-Moraga
(September, 2021)
Tiny Trainable Instruments

Caitlin Anne Morris
(February, 2022)
Exploring The Impact of Simulated Transfer of Sensory Experience on Social Behavior and Empathy

Alfonso Parra Rubio
(September, 2021)
Discrete Cellular Continuum Robots

Gaurav Rajaram Patekar
(September, 2021)
Feeling Climate Crisis

Eyal Perry
(September, 2021)
DNA Canvas: Towards Affordable and Scalable Enzymatic Fabrication of DNA Nanoarrays

Venkata Subhash Chandra Sadhu
(September, 2021)
Physics and Algorithms in Time of Flight Based Computational Imaging

Aruna Sankaranarayanan
(September, 2021)
Interactivity and Authenticity in AI Augmented Videos

Karsten Schuhl
(September, 2021)
Superpose - A Connected Experience of Sound and Space

Aubrey Elizabeth Simonson
(September, 2021)
An Integrated System for Interaction in Virtual Environments

Soumya Pratap Tripathy
(September, 2021)
Sub-Picomolar Detection of SARS-CoV-2 RBD via Computationally-Optimized Peptide Beacons

Anika Nawar Ullah
(September, 2021)
Community Guided Gene Drive Development :: Architecting Action Towards Transcultural Health and Ecological Justice

Shubham Yadav
(September, 2021)
Self-Standing Sub-Cellular Sized Photovoltaic Devices for Minimally-Invasive and Precise Neuronal Stimulation

Master of Science in Real Estate Development

Center for Real Estate Development

James Griffin Geoghegan
The Institutionalization of the American Dream

Ji Ye Ha
(See also M. Arch., Course IV)
Co-Working in Seoul: Integrating Public Infrastructure into the Metaverse

Derek James Hansen
(February, 2022)
Overcoming Obsolescence: A Roadmap for Redeveloping Massachusetts Gas Station Real Estate in a Post-Gasoline World

Fan He
(September, 2021)
Application of the Fama - French Model to Singapore REITs (with K.T. Neo)

Kok Tong Neo
(September, 2021)
Application of the Fama-French Model to Singapore REITs (with F. He)

Teo P. Nicolais
Investment Performance of Small Multi-Family Properties

Jordan Victor Owen
(See also M.C.P., Course XI)
Data Driven Transit Oriented Development Planning: Using with Montreal's New Transit System as a Case Study

Cassie Ann Raazi
(February, 2022)
(See also S.M., Engineering and Management)
The Value of Flexibility in Lease Duration

Master of Science (without specification of field)

Lauren Camron Blackburn
Med. Arts & Sciences
(September, 2021)
Superconducting Asynchronous Logic for Ultra-low Power High Performance Computing

Allan dos Santos Costa
Med. Arts & Sciences
(September, 2021)
Distillation of Protein Language Models for Protein Structure Prediction

Daniel Augusto Marquez
Med. Arts & Sciences
(September, 2021)
An Attempt at Democratizing Resource Allocation for Social Movements Using Decentralized Autonomous Organizations

Andrés Rico Medina
Med. Arts & Sciences
Socio-Environmental Sensor Networks for Community Sensing

SCHWARZMAN COLLEGE OF COMPUTING

Master of Science in Computational Science and Engineering

Program in Computational Science and Engineering

Sarah Abdulaziz Alnegheimish
(See also S.M., Course VI)
Orion: A Machine Learning Framework for Unsupervised Time Series Anomaly Detection

Abdullah Omar M Alomar
(September, 2021)
(See also S.M., Course VI)
Multivariate Singular Spectrum Analysis: A Principled, Practical, and Performant Solution for Time Series Imputation and Forecasting

Manmeet Singh Bhabra
(September, 2021)
(See also S.M., Course II)
Harvest-Time Optimal Path Planning in Dynamic Flows

Aimee Elizabeth Maurais
Multifidelity Covariance Estimation Three Ways

Benjamin James Yu
A Genetic Algorithm Framework using Variable Length Chromosomes for Vehicle Maneuver Planning

Master of Science in Technology and Policy

Institute for Data, Systems, & Society

Ilham K. Ali
Sustainable for All? How Satellite Remote Sensing Contributes to Sustainable Development in Africa and International Climate Policy

Lama Sara Aoudi
(February, 2022)
(See also S.M., Course VI)
An Open-Source Computational Framework for the Scalable Application of Electrification Planning

William Ayres Atkinson
Quantifying a Range of Global Air Pollution Projections and Health Impacts under the Paris Agreement's Temperature Targets

Abhishek Bose
(September, 2021)
Role of Hydrogen in Multi-Sector Decarbonization

Helena Rose Caswell
Win-Win-Win? Evaluating the Climate, Health, and Equity Benefits of Retrofitting Low Income Housing in the US

Axelle Clochard
(February, 2022)
(See also S.M., Course VI)
Using Network Analysis of Job Transitions to Inform Career Advice

Jared Matthew Cochrane
Simulating an Optical Neural Network for Deep Learning in Edge Computing

Pedro de Vasconcellos Oporto
Pathways for Investor Climate Action: Trade-offs and Synergies under the Banner of Net Zero

Tristan Downing
(September, 2021)
Modeling Supply Chains and Markets to Support Humanitarian Response Analysis

Farri Gaba
(See also S.M., Course VI)
Solutions to the Generalized UAV Delivery Routing Problem for Last-Mile Delivery with Societal Constraints

Nicolas Elie Guetta-Jeanrenaud
(February, 2022)
Social Media Data for Policy Decision Making

Jisoo Hong
A Thesis, Allegedly

Jessica Ingabire
What Makes Your Business a Winner: Empirical Analysis Using the Department of Defense Contracts with Small Manufacturing Firms

Teuku Mahfuzh Aufar Kari
(September, 2021)
Causal Impact of Information Crowd-Sourcing Platform on Farmer Welfare

Helen Landwehr
(See also S.M., Course XVII)
Analyzing the Usability of Natural Language Processing for Detecting Disinformation Tactics, Techniques, and Procedures

Jacqueline Paige Lee
Examining the Post-Pandemic Role of Shared Micromobility: A Study of Travel Behavior, Policy, and Equity in Motion

Tony Lanson Lee
Implications of Heating Electrification on Distribution Networks and Distributed Energy Resources

Boyu Liu
(February, 2022)
(See also S.M., Course VI)
Improving Labor Market to Reduce Labor Abuse in South East Asia

Jameson Randall McBride
Clean Heat at What Cost? Economic Optimization of Residential Space Heating in Massachusetts

Molly Katherine McGuigan
Simulating PPE Use in Acute Care Hospitals

Patrick Stephen Meredith-Karam
(September, 2021)
(See also S.M., Transportation)
Exogenous Drivers of Public Transit and Ride-Hailing Ridership: a Study of Policy Intervention, COVID-19, and the Relationship between Ride-Hailing and Public Transit in Chicago.

John Francis Morris
Retrofit Solutions to Electric Power Sector Decarbonization in the American Midwest

Saba Nejad
(See also S.M., Course VI)
Data-Driven Analysis of Time of Day Pricing for Residential Consumers

Jonathan Garrett Novak
Policy and Design Courses of Action to Improve Resilience of Proliferated Low Earth Orbit Constellations Against Adverse Solar Weather

Olivia Peihua Pfeiffer
(See also S.M., Course VI)
Machine Learning for Strength Prediction and Optimal Design of Sustainable Concrete Formulas

Paul Dawson Picciano
Beyond Health Co-Benefits: Air Quality-Related Equity Implications of US Decarbonization Policy

Aaron Matthew Schwartz
(September, 2021)
The Role of Natural Gas in Future Low-Carbon Energy Systems

Elwyn Sirieys
(See also S.M., Course XVI)
Environmental Impact of Space Launches and Societal Response

Maya Elizabeth Slavin
(See also S.M., Course XVI)
Incentivizing Collaboration on Space Sustainability: Detectability, Identifiability, and Trackability of Space Missions

Rebecca Lauren Spiewak
Overlooking the Little Guy: An Analysis of Cyber Incidents and Individual Harms

Ragini Sreenath
(February, 2022)
(See also S.M., Course VI)
Transitioning Transit : Modeling the Electrification of an Intracity Bus System

Cathy X. Wang
(September, 2021)
Ensuring Reliability in a Highly Decarbonized Power System: A Case for Next-Generation Modeling Tools

SCHOOL OF ENGINEERING

Master of Engineering in Civil and Environmental Engineering

Course I-P
Department of Civil and Environmental Engineering

Luke Bastian
Accuracy of Embodied Carbon Estimation During Early-Stage Structural Design

Brian William Borman
Conceptual Structural Design of Core Components for a Horizontal, Compact HTGR

Emily Pearl Condon
Characterizing the Influence of Turbulence Intensity on Energy Production at the Vineyard Wind 1 Farm

Kevin Charles Headrick
Investigating Root Storage and Exudation in the Brachypodium Genus

Sarah Ladhani
Reimagining Urban Highway Overpass Infrastructure in the US: Designing for Spatial Quality and Material Quantity

Olivia Oey
Optimization of Cable-Stayed Bridges at the Conceptual Design Stage

Davis Sebastian Philps
Shear Wall Layout Optimization in Coordination with Architectural Floor Plans

Rovi Chung Porter
(See also S.B., Course I-ENG)
Wake Characteristics Associated with Logjams to Inform River Restoration

Alexandra Whitney Steelman
A Computational Framework for Zero Waste Structural Design

Master of Science in Civil and Environmental Engineering

Course I
Department of Civil and Environmental Engineering

Kexin Chen
Analysis of Potential Demand of On-Demand Urban Air Mobility via Agent-Based Simulation

Michelle Angela Feole
(See also M.B.A., Course XV)
Optimizing the Supply Chain Design for Sourcing and Supply of Critical Materials

Alexandra Hardin
(See also M.B.A., Course XV)
Supply Chain Sustainability Opportunities in the Utility Industry

Drew Meyers
(February, 2022)
The Development and Deployment of Sensors and Algorithms for the Mobile Monitoring of Urban Surface Water Quality

Alexander Ray Muller
(See also M.B.A., Course XV)
Leveraging Analytics for Improved Supply Chain Operations

Mariko Ogawa
(See also M.B.A., Course XV)
Building a Carbon Allocation Methodology across Multiple Business Teams and Activities with Interdependencies

Randall Alan Pietersen
Automated Method for Airfield Pavement Condition Index Determination

Lauren M. Sakerka
(See also M.B.A., Course XV)
Evaluating Strategies for Wide Scale Replacement of Human Inspection with Machine Vision

Kunal Manoj Sanghani
(See also M.B.A., Course XV)
Advanced Functionality of Digital Mining Predictive Analytics & Insights Platform

Lampros Tsontzos
(See also M.B.A., Course XV)
Dynamic Algorithm for Target Inventory and the Impact on Replenishment Strategy

Elli Danae Vartziotis
Inundation Flooding in Urban Environments using on-lattice Density Functional Theory

Tina Nepheli Vartziotis
Calibration of interaction Potentials for Molecular Dynamics-inspired Simulations of Structures: the Role of Dihedral Interactions.

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Amélie Féron
(September, 2021)
Improving Management Strategies for Reduced Freight Costs

Jonathan Michael Williams
(February, 2022)
Incorporation of Carbon Nanoparticles in Polyaryletherketone Matrices for High Performance Liquid Chromatography Applications

Jiayue Zhao
(February, 2022)
Improved Management Practice for Freight Savings

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Jennifer Marie Amlani
(See also M.B.A., Course XV)
Equipment Installation Quality Improvement

April Marie Anlage
(September, 2021)
Relationships between Class Engagement, Community, and Engineering Design Self-Efficacy in Remote, Kit-Based Classes

Austin Forrest Anthis III
(September, 2021)
Six-Axis Levitated Stage with a Novel Flux-Steering Magnetic Hub Actuator

Jonathan Tae-Yoon Bessette
Simple, Sustainable, Water Straight from the Sun - Batteryless Electrodialysis Desalination

Manmeet Singh Bhabra
(September, 2021)
(See also S.M., Comp. Sci. & Eng)
Harvest-Time Optimal Path Planning in Dynamic Flows

Gabriel Bradford
Accelerating Polymer Electrolyte Discovery with Machine Learning

Gustavo Castillo, Jr.
(See also M.B.A., Course XV)
Using Electric Vehicles for Grid Services: Capacity Available and Applications for Electric Utility Commercialization

Bianca Champenois
Reconstructing 3D Ocean Temperature Fields from Real-Time Satellite and Buoy Surface Measurements

George Chunfeng Chen
A Data-Driven Approach to System Dynamics Modeling and Control Design

Luke Chung-I Chiang
(See also M.B.A., Course XV)
Framework and Analytics for Emissions Forecasting and Planning

Baju Chiyezhath Joy
(September, 2021)
Miniaturized Magnetostrictive Antennas for Wireless Sensing Applications

Christopher Michael Cubra
(See also M.B.A., Course XV)
Automating Data-Driven Decisions to Improve Key Financial and Operational Metrics in Semiconductor Manufacturing

Madhurima Das
Assessing Early Stage Design Sketches and Reflections on Prototyping

Rishabh Datta
(February, 2022)
Laboratory Experiments of High-Energy-Density Shocks in Magnetized Collisional Plasma Flows

Austin C. de Maillé
(See also M.B.A., Course XV)
Operations Strategy for the Mass Customization of Additively Manufactured Anatomical Models, Surgical Guides, and Implants

Runpal Singh Sorensen Dhaliwal
(September, 2021)
First-Passage Time Analysis of Particle Transport in the Cytoplasm

Jacob Nathaniel Easley
Feasibility and Design of Solar-Powered Electrodialysis Systems for Agriculture Applications

Tyler J. Eggleston
(See also M.B.A., Course XV)
Capacity Multipliers: Rapidly Scaling Production through Line Balancing and Critical Path Reduction

Michael F. Fernandez
A Virtual Muscle Model of the Arm for EMG-Driven Control of Prostheses

Marie Floryan
Fluid Shear Stress Effects on Cancer Metastasis

Charlotte Méry Folinus
Design and Mechanical Validation of Commercially Viable, Personalized Passive Prosthetic Feet

Tom Frejowski
(September, 2021)
Development of Fine Motion Stages for Six Degree-of-Freedom Submicron Positioning

Amit Galgali
(See also M.B.A., Course XV)
Prototyping of Injection EVA Foam Footwear Midsoles

Jack George Alexander Gammack
Design Knowledge Base Using Natural Language Processing

Ivan Dmitrievich Goryachev
(September, 2021)
Kiosks for Non-Contact Vital Sign Detection

Megan Jené Hagen
(See also Naval E., Course II)
Feasibility Analysis for a Nuclear-Powered Commercial Merchant Ship

Gina Han
Dimensional Control in Ceramics Printed by Projection Microstereolithography

Amin Heyrani Nobari
Generative Adversarial Networks for Inverse Design Problems in Engineering: Methods to Handle Performance, Constraints, and Creativity Requirements

Luke Richard Higgins
(See also M.B.A., Course XV)
The Playbook - A Novel Approach to Identifying Opportunity for on Machine Measurement and Adaptive Machining Projects

Grant Marshall Hosinski
(See also M.B.A., Course XV)
IoT at Amgen - Evaluating and Piloting Industry 4.0 Technology in Biomanufacturing

Dayne Michael Howard
(See also Naval E., Course II)
Quantifying Extreme Event Statistics for Ship Motions and Loads Using Low-Fidelity Models and Recurrent Neural Networks

Yu Huang
(See also M.B.A., Course XV)
Directed Energy Deposition Additive Manufacturing Supplier Sourcing for Aerospace

Thomas Guy Hubschman
(February, 2022)
Assessment of Scaling Rule for Hot Gas Ingestion in Representative Turbine Rim Seal System for Large Industrial Gas Turbines

Se Hwan Jeon
Structuring Optimal Control of Legged Locomotion with Learning-based Methods

Run Jiang
(See also M.B.A., Course XV)
Oversized Package Placement Optimization in Warehouses

Eric Dean Jorgensen
(February, 2022)
Structural Optimization of Regeneratively Cooled Rotating Detonation Rocket Engines

Zahra Kanji
(See also S.M., Engineering and Management)
Classification of Auscultation Sounds Using a Smart System

Hunjoo Kim
(See also M.B.A., Course XV)
Development of Industrial Internet of Things Architecture and Business Strategy for Digital Substation Asset Management

Ava A. LaRocca
Design and Performance of a Highly Mobile, Climbing, Wheeled, Soft-Bodied Robot

Duncan Ru Chieh Lee
Design and Clinical Evaluation of a Digital Transtibial Prosthetic Interface

Allison Lenhard
Smooth Flow Control for On-Chip Pneumatic Micropumps

Joshua James Malone
(See also Naval E., Course II)
The Impact of Electrical Standards on MVDC Shipboard Cable Size

James Christopher McRae
Development of an Ingestible Fluid Wicking Gastric Electrical Stimulation Platform for Hormone Modulation

Andreas P. Mentzelopoulos
Learning Hydrodynamic Coefficient Databases for Vortex Induced Vibration Prediction of Marine Risers Using Sparse Sensor Measurements

Andrew William Moeller
(See also S.M.(N.A.M.E.), Course II)
Extracting Electromechanical Signals for Icebreaker Insights

Healey Ann Montague-Alamin
(September, 2021)
User Based Design of Medical Devices for Translation from Prototype to Clinical Device

Valerie L. Muldoon
Scalable Synthesis of Solid-State Electrolytes Using Flame-Assisted Spray Pyrolysis

Thanh Nha Nguyen
Development of Wireless Sensor Network to Detect Lameness in Dairy Cows

Michael Philip Nitzsche
(September, 2021)
Molten Alkali Metal Borate/Carbonate Salts for High Temperature CO_2 Capture and Electrochemical Conversion

Sean Martin O'Donnell
(See also M.B.A., Course XV)
Automotive Inventory Delivery Location Optimization

Scott David Oberst
(See also Naval E., Course II)
Investigation into the Design of High-Power Plug-In Shipboard Electrical Connectors

Ellen B. O'Connell
(September, 2021)
Method for Continuous Inspection of Product Weight During Lyophilization

Nicholas Ryan Page
(See also M.B.A., Course XV)
Enabling Growth in a Middle-Market Job Shop Environment

Simo Pajovic
(September, 2021)
Nonreciprocal and Exotic Radiative Transfer in Type-I Magnetic Weyl Semimetals

Subeen Pang
(September, 2021)
Machine Learning Regularized Solution of the Lippmann-Schwinger Equation

Sanghyun Park
Bioresorbable Osmotic Pump for Long–Term Contraception

Tae Joong Park
(September, 2021)
Climate and Air Quality Impacts of Electric Vehicles and Comparison to U.S. Tax Credits

Natasha Monet Patterson
(See also S.M.(N.A.M.E.), Course II)
Integration of System Templating into the Rapid Ship Design Environment

Elizabeth Marie Barna Pedlow
(September, 2021)
Ultra-Wideband Error Modeling for Improved Localization

Tamir Peleg
(See also M.B.A., Course XV)
Waste Reduction in Amazon Robotics Sortable High Velocity Fulfilment Using Six-Sigma and Product Design Methods

Alexander I. Peraire-Bueno
(February, 2022)
A Damped Double Dipole UHF RFID Antenna with Application to Wireless Chemiresistive Gas Sensing

Heidi Victoria Peterson
(September, 2021)
Design of a Novel Mechatronic System to Test Prosthetic Feet Under Specific Walking Activity Loads and Evaluate Their Lower Leg Trajectory Error

Devin Wayne Quinn
Shipboard Fault Detection Methods for Condition-Based Maintenance

Felipe Quintella Correia
(See also M.B.A., Course XV)
Optimizing Demand Re-Allocation under Fixed Capacity Commitments

Lyle Regenwetter
Data-Driven Bicycle Design using Performance-Aware Deep Generative Models

Ivan Andres Reyes
(See also S.M.(N.A.M.E.), Course II)
Design and Modeling of the Navy Integrated Power and Energy Corridor Cooling System

Christopher Matthew Antonio Reynolds
(See also Naval E., Course II)
Relationship of Mechanical Deformations and Electrochemical Properties of Lithium Ion Batteries-An Experimental Study

Simon Béat Rufer
Technoeconomic Analysis and Design of CO2 Capture and Conversion Systems

Dionysios Sema
Predicting Material Properties with Machine-Learned Interatomic Potentials

Julie Shen
A Novel Trajectory Vector Approach for Characterizing Dynamic Changes in the Performance-Load Representation of Cardiac State

Ben Andrew Sidell
(See also M.B.A., Course XV)
Advancing Replenishment Efficiency Utilizing Unit of Measure and Planogram Settings

Kurran Singh
Active Simultaneous Localization and Mapping in Perceptually Aliased Underwater Environments

Stephanie Hope Smolinski
(See also M.B.A., Course XV)
Effects of Standardization in a Developing Manufacturing Environment

Rika Sugimoto Dimitrova
Towards Perturbation-free Identification of Human Standing Balance

Neha Sunil
(September, 2021)
Deformable Object Manipulation with a Tactile Reactive Gripper

Hannah Jacqueline Szapary
Mechanical and Biologic Impact of Cyclic Loading on Bovine and Human Models of Osteoarthritis

Lisa Tang
An Evaluation of Household Energy Systems in the Himalayan Region

Christopher R. Tomlinson
(See also S.M.(N.A.M.E.), Course II)
Design of Securing Mechanism for Power Converter in Navy Integrated Power and Energy Corridor

Andrew Christopher Tresansky
(See also M.B.A., Course XV)
Assessment and Operationalization of Automation in Final Product Manufacturing

Pranav Vangala
(See also M.B.A., Course XV)
Operations Strategy for Evolving Customer Profiles

Kelli Michelle Waterman
(See also Naval E., Course II)
Microchannel Thermal Management Analysis and Simulation Tool for Integration into Electronic Component Design

Dakota Lee Wenberg
(September, 2021)
Method for Kalman Filtering Pose Estimates from LIDAR Scans During the Landing Phase

James Han Zhang
(September, 2021)
Electrolyte Structure with Explicit Solvent in Nanoslit Capacitors Using Classical Density Functional Theory

John Zhongyuan Zhang
(September, 2021)
An Intracochlear Hydrophone and Amplifier

Xinlin Zhong
Developing a Data-Driven Digital Twin Model for Lubricant Oil Transport and Oil Consumption Study in Internal Combustion Engines

Yang Zhong
(September, 2021)
(See also S.M., Course VI)
Understanding and Characterizing Thermal Transport in 2D van der Waals Nanoelectronics

Lara Zlokapa
An Integrated Design Pipeline for Tactile Sensing Robotic Manipulators

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David Elatov
(February, 2022)
(See also S.M.(Ocean Eng.), Course II)
Radiated Noise Assessment of Shipboard Systems Using Vibration Analysis

Anthony C. Kriezis
Ship Power Prediction Using Machine Learning

Andrew William Moeller
(See also S.M., Course II)
Extracting Electromechanical Signals for Icebreaker Insights

Natasha Monet Patterson
(See also S.M., Course II)
Integration of System Templating into the Rapid Ship Design Environment

Ivan Andres Reyes
(See also S.M., Course II)
Design and Modeling of the Navy Integrated Power and Energy Corridor Cooling System

Christopher R. Tomlinson
(See also S.M., Course II)
Design of Securing Mechanism for Power Converter in Navy Integrated Power and Energy Corridor

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Clara Elisabeth Green Berry Sage Dahill-Baue
Time-Optimal Path Planning in the Portugal-Azores-Madeira Ocean Region

David Elatov
(February, 2022)
(See also S.M.(N.A.M.E.), Course II)
Radiated Noise Assessment of Shipboard Systems Using Vibration Analysis

Nikolai Gershfeld
Adaptive Collaborative Channel Finding Approaches for Autonomous Marine Vehicles

Master of Science in Materials Science and Engineering

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Department of Materials Science and Engineering

Andres F. Badel
Low-Cost Electrochemical Approaches to Deep-Decarbonization

Brooks Todd Clingman
Sodium-Ion Battery Cathode Active Material Cost Drivers and Manufacturing Scale-Up Barriers

Qiaohao Liang
(September, 2021)
Benchmarking the Performance of Bayesian Optimization across Multiple Experimental Materials Science Domains

Gillian Kay Micale
Integrated Photonic Spectroscopy

Changhwan Oh
Investigating Dislocation Behavior in High Entropy Alloys Using Atomistic Simulations

Master of Engineering in Electrical Engineering and Computer Science

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Department of Electrical Engineering and Computer Science in conjunction with the Schwarzman College of Computing

Marwa Abdulhai
(September, 2021)
Factored State Abstraction for Option Learning

Anisha Agarwal
Text-Free Audio Captions of Short Videos from Latent Space Representation

Vibha Agarwal
(September, 2021)
Image Registration and Bias Evaluation for a COVID-19 Pulmonary X-Ray Severity (PXS) Score Prediction Algorithm

Elaheh Ahmadi
(September, 2021)
Hyperparameter Optimization for Opaque Models

Yodahe Kinsew Alemu
Entwine VR: A Toolkit for Creating Behavioral Experiments that Utilize Virtual Reality

Christian Omar Altamirano Modesto
(September, 2021)
Formal Verification of an Implementation of the Roughtime Server

Md Sanzeed Anwar
(September, 2021)
Seeding with Time Constrained Queries

Julia Marshall Arnold
(See also S.B., Course VI-1)
Ground Station Mixed-Signal PCB and SFP Ethernet-to-Optical Connector for the Deployable Optical Receiver Aperture (DORA) CubeSat

Fadi Atieh
(February, 2022)
A Novel Statistical Procedure Towards the Discovery of the Higgs Boson

Amadou Yaye Bah
Electromagnetic Printhead Core for Programming Magnetic Pixels

Cole S. Baker
Hyperbolic Graph Embedding of Magnetoencephalography Brain Networks to Study Brain Alterations in Patients with Subjective Cognitive Decline

Avital Baral
(February, 2022)
Continuous Measured Improvement: A New Approach to Meeting the Municipal Cybersecurity Challenge

David A. Bau IV
Interactions Between Syntax and Semantics in Language Models

Scott C. Becker
(See also S.B.,Course XVIII)
Analyzing a Computer's Ability to Monitor Data Provenance Events

Abigail C. Bertics
(February, 2022)
How Linguistic Exposure Modulates the Acceptability of Long-Distance Dependencies

Jack Bouhanna
Comparative Analysis of an Armenian Hymn Through Digital Signal Processing and Music Information Retrieval

Terryn Diane Brunelle
(See also S.B., Course VI-3)
Parallelizing Tree Traversals for Binomial Option Pricing

Katarina M. Bulovic
Designing for Tinkerability for Accessibility

Ruidi Cao
Local Algorithms for Sparsification of Average-Case Graphs

Grace C. Cassidy
(February, 2022)
Advancing the Performance of a Switched-Mode Radio Frequency Power Generation Architecture

Rishabh Chandra
(September, 2021)
Relating Racial Disparities to Financial Concerns and Shared Decision Making in Opioid Prescriptions

Rhian A. Chavez
(February, 2022)
Design of a Precision, Very Low 1/f Noise, Low Power, Rail-Rail I/O, Integrated Bi-CMOS Operational Amplifier

Eric R. Chen
(September, 2021)
Understanding Exploration in Reinforcement Learning

Emily S. Cheng
(February, 2022)
Understanding Symbolic Communication in Humans and Robots

Katherine Y. Cheng
(See also S.B.,Course VI-3)
Frame Field Guided Hexahedral Meshing

Leon Cheng
(September, 2021)
Coordinated Planning and Visualization for an Electromagnetically Actuated Reconfigurable Robot

Lok Hin Cheng
(February, 2022)
Digital Control for Dynamic Efficiency Optimization in Switching Regulators

Christopher W. Cheung
(February, 2022)
Augmented Reality-Based Interactive Game-Editing Interfaces

Caroline M. Chin
(September, 2021)
How Do Pretrial Judges Respond to Election Cycles?

Samuel B. Chinnery
TCAD-Informed Surrogate Models for Semiconductor Devices

Erica J. Chiu
Uniform Sampling over Level Sets

Jeana Choi
(February, 2022)
Automatic, Careful Online Packing of Groceries Using a Soft Robotic Manipulator and Multimodal Sensing

Isabelle Paris Chong
Ally: Designing Interfaces for Human + AI Collaborative Creativity for Computer Aided Design (CAD) Applications

Cecelia C. Chu
(February, 2022)
PowerML: Loop Gain Identification for DC-DC Converters from Load Step Transient

Spencer Compton
(See also S.B., Course VI-3)
Information-Theoretic Algorithms and Identifiability for Causal Graph Discovery

Van R. Coykendall
(February, 2022)
Scene Text Localization and Recognition for Images of Serial Numbers and Odometer Readings

Ria A. Das
Combining Functional and Automata Synthesis to Learn Causal Reactive Programs

Alexander Dimitrakakis
(September, 2021)
Refinement of the Computational Vaccine Optimization Framework (OptiVax) through the Development and Analysis of a Better Algorithm for Vaccine Design Choice

Dylan D. Doblar
(February, 2022)
Meta-learning and Enforcing Useful Conservation Laws in Sequential Prediction Problems

Samuel Joseph Dorchuck
(September, 2021)
Goal-Directed Systems Testing: Automated Execution of Intelligently Generated Cyber Attack Plans

Robert Benjamin Durfee
Enabling True Concurrency in Architectures for Speculative Execution of Ordered Irregular Parallelism

Ramya A. Durvasula
(February, 2022)
Interactive User Interface for SQL Code Generation from Natural Language

Ahmed Nimir Elbashir
Improving Police and Criminal Court Data Transparency in the United States: A Case Study

Jonathan E. Esteban
(February, 2022)
Simulating Network Lateral Movements through the CyberBattleSim Web Platform

Andrés Fábrega Gerbaud
Voter Registration: A Security and Cryptography Perspective

Violet Celeste Felt
(See also S.B., Course VI-3)
Machine Learning Models for On-Orbit Detection of Temperature and Chlorophyll Ocean Fronts

Julia M. Fiksinski
(September, 2021)
Practica: A Music Education Application for Learning Jazz Improvisation

Suyash Pradeep Fulay
(February, 2022)
Creating and Interpreting a Cultural Landscape on Twitter to Understand People and Audiences

Joanna J. Gerr
The Comic Artist's Tools Suite: Centralized and Intuitive Non-Photorealistic Computer Graphics Renderings

Yianni Giannaris
(September, 2021)
Securing Operating Systems Using Hardware-Enforced Compartmentalizaiton

Charvi Gopal
Network Visualization and Anomaly Detection in International Timber Trade Flows

Darnell S. Granberry, Jr.
(February, 2022)
Deep Neural Networks for Learning Protein Vibrational Behaviors to Characterize Structure and Function

Zackary J. Gromko
Accelerated Channel Operating Margin and Applications to Design Optimization

Joshua A. Gruenstein
(September, 2021)
Residual Model Learning for Microrobot Control

Alexander F. Gu
Generating Code Skeletons from Natural Language

Deepankar Gupta
(February, 2022)
Interpretable Machine Learning Methods for Landslide Analysis

Jeanne L. Harabedian
Modeling the Arterial System to Improve Ultrasound Methods for a Non-Invasive Blood Pressure Measurement

Elizabeth M. Harkavy
(February, 2022)
Accesssible AI That's Out of This World: Globalizing AI Literacy through Problem-Based Learning and Deep Learning Models in a Low Code Environment

Peter Kimball Hart
(February, 2022)
Comparative Study of Computer Vision Methods for Infant Gaze Detection

Emmanuel Havugimana
(September, 2021)
Augmenting Data for Urban Metabolism of Cities Tool Using Machine Learning and Satellite Image Analysis of City

Alex Herrera
Spatial Optimization of an Existing, Low-Cost, Sensor Network for Air Pollution in London

Luis Fernando Herrera Arias
(September, 2021)
An Experimental Evaluation of Learning-Based Methods for Loop Closure Detection in Simultaneous Localization and Mapping

Nancy Yahel Hidalgo
(February, 2022)
A Basic Isolated Half-Bridge Silicon Carbide Gate Driver for Electric and Hybrid Electric Vehicles

Adeline F. Hillier
(See also S.B., Course VI-2)
Supervised Calibration of Ocean Boundary Layer Parameterizations

Chessa N. Hoekstra
(September, 2021)
Learning from Experience: Interactive and Ethical Curricula for Teaching Reinforcement Learning

Amanda Elisabeth Horne
(See also S.B., Course VI-2)
Optimizing Memory-Corruption Security Defenses for Real-Time Systems

Henry Hu
Transforming Dependency Parses into Ternary Expressions for Enhanced Indexing and Matching

Stephanie M. Hu
(September, 2021)
A Recurrent Network Approach to G-Computation for Sepsis Outcome Prediction Under Dynamic Treatment Regimes

Ivy Y. Huang
(February, 2022)
Synthesizing Tabular Time Series Data Using Transformers

Vivian Huang
(February, 2022)
Warm-Starting Networks for Sample-Efficient Continuous Adaptation to Parameter Perturbations in Multi-Agent Reinforcement Learning

Saadiyah B. Husnoo
(September, 2021)
A Scalable Server Platform and API Design for Real-Time Health Monitoring and Diagnostics

Nada Hussein
(September, 2021)
Machine Audition Curriculum and Real-Time Music Accompaniment

Yow Shiuan Hwang
Identifying, Characterizing, and Mitigating Wind and Solar Resource Shortages Across the Continental United States

Spencer David Hylen
Primary Market Dynamic Pricing for Sports Tickets: Theory and Application

Andrea Jessica David Jaba
Random Sequential Encoders for Private Learning in NLP

Finnian P. Jacobson-Schulte
A First Step Towards Understanding Sperm Whale Communication and Behavior

Satvat Jagwani
(September, 2021)
Map Inference from Satellite Segmentation Data through Reinforcement Learning: A Novel Approach

Kriti Jain
Federated Learning for Resource Constrained Devices

Eric Jiang
Automating the Generation of Attack Trees and Improvements to the Attack Planner

Stacia Edina Johanna
Generating Coding Exercises for Language Concepts by Searching, Simplifying, and Annotating Existing Code

Brandon V. John
Algorithm-Agnostic System for Measuring Susceptibility of Cryptographic Accelerators to Power Side Channel Attacks

Jaeyoung Jung
Low-Power Communication Circuits for Net-Zero-Energy IoT Nodes

Luann C. Jung
(See also S.B., Course VI-3)
Gradient Subgroup Scanning for Distributionally and Outlier Robust Models

Violetta Jusiega
Designing a User Interface for Counterfactual Simulations of Adaptive Treatment Strategies

Patrick D. Kao
(See also S.B., Course VI-3)
Robust Flight Navigation with Liquid Neural Networks

Arpan Kaphle
An Intent-based Neural Monte Carlo Tree Search Framework for Synthesis of Printed Circuit Boards

Shreyas Kapur
Human-Level Learning in Novel Environments

Mihir Prasad Khambete
Development and Evaluation of Generative Adversarial Networks for Predicting Central Hemodynamics

Evan M. Kim
Towards Data-Driven Cognitive Disease Classification Using Machine Learning and the Digital Symbol Digit Test

Hyunji Kim
(See also S.B., Course VI-3)
Safe Exploration for Dynamic Computer Systems Optimization

Yo-whan Kim
(See also S.B., Course VI-3)
How Transferable are Video Representations Based on Synthetic Data?

Silvia Elena Knappe
Sensing String Displacement as a Control Modality: Sensor Design and Implementation

Vedaant P. Kukadia
(September, 2021)
The Development and Deployment of Mobile Apps and Server Platform for Real-World Screening of Pulmonary and Cardiovascular Disease in Low-Resource Areas

Madison Kimberly Landry
(February, 2022)
Benefits of Branches in Sparsely Connected Networks

Maximillian S. Langenkamp
How Open Source Machine Learning Software Shapes AI

Dylan Robert Lewis
Towards Automated Assessment of Crowdsourced Crisis Reporting for Enhanced Crisis Awareness and Response

David Daiyun Li
(February, 2022)
Agent-Based Approach to Simulating Mobility as a Service

Tingyu Li
Modeling Income Segregation and Accessibility Using Large-Scale Mobility Data

Wanlin Li
(See also S.B.,Course XVIII)
Contention Bounds for Locking Computations

Yanlin Li
Building a Cross-Platform Bridging Library for Native Mobile SDKs

Yunxing Liao
Dataset Deduplication with Datamodels

Gloria Zhi-Xian Lin
(February, 2022)
(See also S.B., Course VI-3)
Bayesian Active Structure Learning for Gaussian Process Probabilistic Programs

Kun Lin
(September, 2021)
Learning to Ground Multi-Agent Communication with Autoencoders

Xin Yu Lin
(See also S.B., Course VI-2)
Measuring Image Difficulty Under Limited Presentation Time: Towards Building Better Test Sets for Object Recognition

Emily Liu
(September, 2021)
A Metastudy of Algorithm Lower Bounds

Emma J. Liu
(See also S.B., Course VI-3)
Self-Training and Calibration for Learning with Limited Data

Renbin Liu
Real-Time Social Media Content Recommendation for Live Sports Events

Sabrina Liu
Generating Gaseous Emboli Mimics in an ECMO Flow Phantom

Kerri Lu
(See also S.B.,Course VI-2)
Learning Boiling Properties of Materials

Mindren D. Lu
(See also S.B.,Course VI-3)
Enhanced Potts Models for Improved Computational Protein Design

Haokuan Luo
(February, 2022)
Increasing the Success Rate for Indoor Object Navigation by Accurate Object Detection and Efficient Exploration

Rami Manna
(September, 2021)
Constructing Low Resource Approaches to Improve Speech-to-text Translation from Modern Standard Arabic to English

Christopher G. Mauck
(February, 2022)
Impact of Covid Pandemic on Student Participation in Intro CS MOOC

Jacob T. McGuire
(See also S.B., Course VI-2)
Hybrid Computational Framework for Real Time Foliage-Penetrating Geiger Mode LiDAR Data Processing

Lingjie Mei
Falcon: Fast Visual Concept Learning by Integrating Images, Linguistic Descriptions, and Conceptual Relations

Enrico J. Micali
(February, 2022)
Optimal Reinforcement Learning with Black Holes

Mubarik M. Mohamoud
Software and Hardware Infrastructure for Visual Inertial Navigation

Tammam Mustafa
Parallel and Distributed Just-in-Time Shell Script Compilation

Bhavik V. Nagda
(September, 2021)
CHuff: Conditional Huffman String Compression

Mostafa H. Negm
(September, 2021)
Current Shuttling Cell Voltage Balancer: Design, Evaluation, and Modeling

Susan Ni
(September, 2021)
Hardware Implementation of a Complete Vision-Based Navigation Pipeline

Sara Katherine Nicholas
Long Term Policy Goals Under Electoral Competition Given Varied Temporal Discount Rates Among Voters

Maya Katherine Nielan
Quantifying Exertion for American Football Linemen via Force, Acceleration, and Heart Rate Measurements

Caleb B. Noble
Automated Assessment of Environment Diagrams

Joe Collins O'Connor
Syntactic Transfer for Low-Resource Machine Translation with Contextual Parameter Generation

Clemente Ocejo Elizondo
Modeling with Attention in Demand Forecasting and Beyond

Juan M. Ochoa Ortiz
(February, 2022)
Pre-trained Language Models for Clinical Systematic Literature Reviews

Carolina Ortega Pérez
FlexC: Flexible Compartmentalization Through Automatic Policy Generation

Stephen E. Otremba, Jr.
SmartPitch: Applied Machine Learning for Professional Baseball Pitching Strategy

Nassim Oufattole
Optimizing Tabular Data Synthetic Data for Regression/Classification

Gregory M. Pailet
(February, 2022)
Using Sports Videos to Showcase Exciting Content to Viewers

Hannah Hailan Pang
Computational Action in Action: Process and Tools that Empower Students to Make a Real-World Impact Using Technology

YeonHwan Park
Generating Differentially Private Synthetic Text

Fjona Parllaku
Longitudinal Biomarkers for Onset Dementia Diagnosis: The Case of Emotion and bvFTD

Shwetark Patel
Non-Interactive Cross Chain Atomic Swaps & Transformable Discreet Log Contracts

Yixuan Pei
(September, 2021)
Language Grounding: Probing and Augmenting Transformers for Procedural Text Comprehension

Angelos Pelecanos
Non-Asymptotic t-Wise Independence of Substitution-Permutation Networks

Eric John Pence
Beyond Cryptography: Deniable Privacy for Secure Data Aggregation

Brandon A. Perez
Design Optimizations for Action Recognition Applications

Áron Ricardo Perez-Lopez
(September, 2021)
Puppetmaster: A Certified Hardware Architecture for Task Parallelism

Isaac S. Perper
(September, 2021)
A Low-Cost, Scalable Platform for Sub-Centimeter UHF RFID Positioning

Jacob D. Phillips
(February, 2022)
Unsupervised Latent Debiasing of Language Models

Joshua J. Piel
(February, 2022)
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Jacob W. Pritzker
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Sai Sameer Pusapaty
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Saumya Rawat
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Holly Anne Rieping
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Premila Rowles
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Keithen E. Shepard
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Cel Andromeda Skeggs
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Elijah B. Stanger-Jones
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George Stefanakis
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Patroklos N. Stefanou
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Daniel J. Stein
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Daniel X. Sun
(September, 2021)
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Max R. Tell
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Nicole D. Thumma
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Mihir Yatin Trivedi
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Matthew James Turner
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Sidney Y. Vermeulen
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Julian T. Viera
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Charles J. Vorbach
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Julia Noel Wagner
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Brice Wang
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Fan Francis Wang
Verik: Reinterpreting Kotlin as a Hardware Description Language

Jennifer L. Wang
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Julia Jiaye Wang
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Ming Wang
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Yi Wang
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Babu-Abel M. Wanyeki
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Nathan W. Weckwerth
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Danielle Marie White
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Christien S. Williams
(February, 2022)
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Jan Robert Wójcik
Automated Optimal Ultrasound Transducer Simulator

Madeline M. Wong
Beatty: Automatic Tempo Curve Synthesis for Expressive MIDI Track Playback

Wesley M. Woo
(February, 2022)
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Mark J. Wright
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Julia J. Wu
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Brian S. Xia
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Zhuofan Xie
(February, 2022)
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Helen J. Xu
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Steven Yang
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Aaron J. Yeiser
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Rahul V. Yesantharao
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Claire Yin
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Yueyang Ying
(February, 2022)
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Lisa Y. Yoo
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Albert S. Yue
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Kevin Yue
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Annie T. Yun
(September, 2021)
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Mikaeel M. Yunus
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Timothy D. Zavarella
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Franklin Zhang
(February, 2022)
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Jerry Zhang
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Sammy W. Zhang
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Jiajia Zhao
(September, 2021)
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Elizabeth Y. Zou
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Tiwalayo Terrence-Luke Aina
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Ruiwen Fu
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Karthik Nair
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Lawrence C. Wong
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Sayed Saad Afzal
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Shyan Shaer Akmal
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Christian Alexander Allinson
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Sarah Abdulaziz Alnegheimish
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Orion: A Machine Learning Framework for Unsupervised Time Series Anomaly Detection

Abdullah Omar M Alomar
(September, 2021)
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Alexander Joseph Andonian
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Manel Baradad Jurjo
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Emma K. Batson
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Taylor Elise Baum
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Akhilan Boopathy
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Isaiah August Brand
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Yuan Cai
(February, 2022)
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Minghan Chao
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Kristin YiJie Chen
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Tao Chen
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Yishen Chen
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Axelle Clochard
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Lalita Devadas
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Yuqin Duan
(September, 2021)
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Mohamed Elsheikh
A 2-D Scalable Third Harmonic Radiator at 291.3 GHz with -2 dBm of Radiated Power in 22 nm FinFET Technology

Taylor L. Facen
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Wei Fang
(September, 2021)
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Xiaolin Fang
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Faraz Faruqi
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Xiang Fu
Simulate Time-integrated Coarse-grained Molecular Dynamics with Geometric Machine Learning

Farri Gaba
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Seyed Khashaiar Gatmiry
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Bilha-Catherine Githinji
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Chenghao Guo
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Zhen Guo
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Poorya Habibzadeh
(February, 2022)
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Pouya Hamadanian
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Mark Thomas Hamilton
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Alexandra M. Henzinger
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Evan Michael Hernandez
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Brice Huang
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Jacob Minyoung Huh
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Yuka Ikarashi
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Thavishi Harindi Illandara
Active Keyframe Learning (AKL): Learning Interaction and Constraint Keyframes from a Single Demonstration of a Task

Athul Paul Jacob
Learning Effective and Human-Like Policies for Strategic, Multi-Agent Games

Dustin Isidore Jamner
A Framework for Modular, Extensible, Equivalence- Preserving Compilation

Patricia Helena Jastrzebska-Perfect
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Tejas Kumar Jayashankar
(February, 2022)
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Zeyu Jia
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Wonki Kang
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John Alexander Keszler
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Muhammad Ibrahim Wasiq Khan
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Ching-Yun Ko
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ByeongJo Kong
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Cheng-I Lai
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Yi-Lun Liao
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Alice Qianlan Wu
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Annan Zhang
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Xinyi Zhang
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Yang Zhong
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Jiadi Zhu
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Yuan Zhu
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Andrew C. Mikkelson
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Lois Eileen Nersesian
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Giulio Alighieri
(February, 2022)
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Attended School of Chemical Engineering Practice in Lieu of Thesis

Ronghua Bei
(February, 2022)
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Marc Dylan Berliner
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Attended School of Chemical Engineering Practice in Lieu of Thesis

Ruoqing Cai
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Jianqiao Cui
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Weiran Gao
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Wei Han Lim
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Watchara Ouysinprasert
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Samuel Patrick Austin
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Nicholas Gerald Belsten
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Harsh Girishbhai Bhundiya
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Daniel John Borchik
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Yang Chen
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Matthew Nicholas Corrado
Active Thermal Augmentation and Ultra Dense MEMS-Based Electrospray Thrusters

Mary Dahl
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Annick Jade Dewald
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A Multidisciplinary Analysis of a Stratospheric Airborne Climate Observatory for Key Climate Risk Areas

Rakesh Dubey
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Allegra Danae Farrar
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Titilayo Opedola Fasoro
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Amelia T. Gagnon
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Chloé Gentgen
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Nathan Harold Hughes II
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Madeleine Christine Jansson
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Shreeyam Kacker
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Walter Thomas Kelso III
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Evan Laith Kramer
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Alexander J. Kunycky
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Zhenyu Liu
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Trevor V. Long
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Yanbin Long
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Michael James Lunny
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Ara Mahseredjian
A Data-Driven Approach to Departure and Arrival Noise Abatement Flight Procedure Development

Jeffrey William Miller
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Adam Munekata
Safety in US Air Force Tandem Seat Pilot Training Applying STAMP Processes

Siddharth Nagar Nayak
Learning Based Scheduling

Nils Pachler de la Osa
A Complete Resource Allocation Framework for Flexible High Throughput Satellite Constellations

William Ellis Parker
Learning-Based Methods for Spacecraft Dynamics Modeling, State Estimation, and Control

Duc Ngoc Pham
A Framework of a Power Management System for a Hybrid Electric VTOL Aircraft Using Optimal Control

Daniel N. Pickard
Dynamic Eruptions on Soft Hydrogel Surfaces

Justin Poh
(February, 2022)
A Top-Down, Safety-Driven Approach to Architecture Development for Complex Systems

Justine Nikole Schultz
Steady-State and Transient Thermal Modeling of Solid Electrolysis (SOXE) within the Mars Oxygen In-Situ Resource Utilization Experiment

Peter David Sharpe
(September, 2021)
AeroSandbox: A Differentiable Framework for Aircraft Design Optimization

Elwyn Sirieys
(See also S.M., Technology and Policy Program)
Environmental Impact of Space Launches and Societal Response

Maya Elizabeth Slavin
(See also S.M., Technology and Policy Program)
Incentivizing Collaboration on Space Sustainability: Detectability, Identifiability, and Trackability of Space Missions

Connor Thomas Stehr
(See also M.B.A., Course XV)
Accelerating Adoption of Large-Format Additive Manufacturing in Aerospace Tooling

June Shelby Stenzel
Implementing Model-Based Verification for The Large Lenslet Array Magellan Spectrograph

Delia Stokes Stephens
(See also S.B., Course XVI)
RikerSat: An Architecture for Solving Constraint Satisfaction Problems under Uncertainty

Spencer Vinh Taylor
Energy Absorption and Dynamic Behavior of Architectured Interpenetrating Phase Composites

Albert Quang-Thong Thieu
On-Orbit Pointing Risk Mitigation for the Agile MicroSat (AMS) CubeSat Laser Guidestar Payload

Sophia K. Vlahakis
On-orbit Characterization of a Microelectromechanical Systems (MEMS) Deformable Mirror (DM): Mission Results from the Deformable Mirror Demonstration Mission (DeMi) CubeSat

Carter John Waligura
Investigation of Spalart-Allmaras Turbulence Model Modifications for Hypersonic Flows Utilizing Output-Based Grid Adaptation

Charity Wangari
Emission Capabilities of Nafion-Based Ion Emitting Surfaces

Jerrod Alexander Wigmore
(September, 2021)
Network Reliability and Routing under the MVN Model

Michelle Xu
Computational Modeling and Validation of the Deformation and Failure Response of Human Metastatic Vertebrae

Syed Shayan Zahid
Impact of Water Injection on Emissions of Nitrogen Oxides from Aircraft Engines

Master of Science in Biological Engineering

Course XX
Department of Biological Engineering

Shelbi Nicole Parker
Creating a New Malaria Vaccine Design that uses a Blood Stage P. falciparum Chassis for Non-Blood Stage Antigen Presentation

Master of Science in Nuclear Science and Engineering

Course XXII
Department of Nuclear Science and Engineering

Jacob Lazer Adams
(September, 2021)
Drawn Polymer Fiber Recuperative Heat Exchangers

Ali Saleh Aljefri
(September, 2021)
Technical and Economic Feasibility of Crushed Rock with Synthetic Oil Heat Storage Coupled to Light Water Reactors in the United Arab Emirates

Brandon A. Aranda Ocampo
Assessment of Multi-Phase CFD Frameworks for High Void Fraction Flow in Large Diameter Systems

Justin Michael Knoll
Alarm for Autonomous UAV Radiation Mapping Algorithm

Peninah Lise Levine
(See also S.B., Course XXII)
Feasibility Study of Compact Neutron Resonance Transmission Analysis using a Linac, a Fusion-Based Neutron Generator, and an Isotopic Source

Xinyao Liang
(September, 2021)
Advanced Thermal-Fluid Solutions for Underwater Diving Suit and COVID-19 Facial Mask

Can Pu
(September, 2021)
(See also S.M., Course VI)
Non-Gaussian Factor Graph Inference for Robotic Navigation

Jefferson Braxton Sesler
Simulating Properties of Scintillating Integrated Fibers as Conformal Radiation Detectors

Shangjie Xue
(September, 2021)
(See also S.M., Course VI)
Machine Learning Aided Aerial Radiation Mapping

Yuan Zhu
(See also S.M., Course VI)
Digital Noise Reconstruction with a Quantum Sensor

Master of Applied Science in Supply Chain Management

Program in Supply Chain Management

Ibrahim Mohammed AlArfaj

Katherine Renee Arnold

Ankita Arora

Yalcin Arslan

Pedro Alejandro Benitez Nuñez

Grace Leigh Caza

Vikas Chandra

Muhammad Sohaib Chaudhry

Felicia Suat Teng Chen

Meiling Chen

Ashish Chhabria

Rachael Grace Clark

Kenneth Adam Critchlow

Didi Dai

Lisandro de Latorre

Matias Escuder Rebori

Karim Farran

Lauren Jennifer Fellin

Elise Nicole Fredericks

Miguel Angel Garcia Gonzalez

Danniel Gonzalez

Daniel Granados Nicholls

Frances Elizabeth Gremillion

Ricardo Guadarrama Arias

Jesús Guajardo Ramos

Avanika Gupta

Abdulrahman S S Gweder

Himanshu Halbe

Joaquin Andres Hidalgo

A H M Shahidul Hoque

Brody Will Hughes

So Ikeya

Aravindan Jayantha

Jinwoo Je

Sai Supraja Rao Karanam

Soon Kiat Ker

Lauren Mae Konopinski

Tony Seong Kook

Emre Muzaffer Kulluk

Debra Shun-Yuh Lee

Kun-Zhe Lee

Nora Lestari

Xiaoyue Li

Yulu Li

Jui Han Lin

Kai-Wei Lin

Siqing Liu

Jason Andrew Maen

Alexandros Mamakos

Lauren Nicole Matz

Jennie Waterfall May

Timothy Edward McCormack

David Esteban Mera

Andrew Scott Miller

Christine Maria Mueller

Sanjay Kumar Naithani

André Nascimento Costa

Paula Ochsenius Olhaberry

Irene Obianuju Ogbuefi Chukwujekwu

Mykola Oleksyn

Weiqian Pan

Maria del Pilar Pardo Rodriguez

Pai Peng

Taylor Marie Peterson

Pranav Prakash

Shah Akibur Rahman

Michelle Stephanie Ramírez Moreno

Varun Shekhar Rasiti Chandrashekhar

Karoline Rueckerl

Hasan Ahmed Suleiman Shinar

Deviana Ferdinanda Sia

Tejinder Singh

Sandeep Kumar Sirikande

Alejandro Souza Bosch

Alex St. Lifer

Maksat Taibek

Michael Wai-En Tchen

Nan Wang

Taryn Ashley Wenske

Nicholas Shiverick Winters

Liam James Woolley-MacMath

Huisi Wu

Jessica Yao Xiong

Lili Yao

Master of Engineering in Supply Chain Management

Program in Supply Chain Management

Jia Kai Samuel Chin
Solving the Traveling Salesman Problem via Semantic Segmentation with Convolutional Neural Networks

Master of Science in Computational and Systems Biology

Bruna Romila Lima
Defining the Molecular Basis for the β-catenin and CDC73 Interaction

Master of Science in Engineering and Management

Program in System Design and Management

Robert Bruce William Andrais
(September, 2021)
Probabilistic Production Forecasts Using Machine Learning

Gloria Jesica Bahl Chambi
(September, 2021)
Technology Roadmapping for Energy Storage Using ZEBRA Batteries

Elizabeth White Baker
(February, 2022)
Safety in Hospital Medication Administration Applying STAMP Processes

Nicholas Joseph Borge
Deep Pockets: The Economics of Deep Learning and the Emergence of new AI Platforms

Louis Caliwag Catalan
(September, 2021)
Shaping of Strategic Staffing System

Kristin YiJie Chen
(September, 2021)
(See also S.M., Course VI)
A Systematic Approach for Cyber Risk Management

Angélica Graciela Chíncaro Donayre
The Story behind the Output: Enhancing Trustworthiness in Design Research through Visual Strategies

Michelle Marie Chung Chung
Designing for Informational Needs Among Small Producers in Panama: A Human-Centered Approach

Elliot James Collins
(See also Naval E., Course II)
A Method for Organized Institutional Learning in the Navy Shipbuilding Community

Christian Emerson Dowell
(September, 2021)
Machine Learning for Downstream Oil and Gas Refineries: Applications for Solvent Deasphalting

Eric John Ehn
(February, 2022)
Multidisciplinary Architectural Study of On-Orbit Space Vehicle Refueling

Joshua Wayne Fant
(September, 2021)
'Firefighting' within the U.S. Coast Guard's Shore Infrastructure Capital Investment Program

Evan Batman Joseph Feldman
The Economic Impact of the Coronavirus Pandemic in the USA

Nestor V. Figueroa
(February, 2022)
Using a System and Design Thinking Approach to Improve Citizen Utility from Open Data Initiatives within the Government of Puerto Rico

Christopher Anders Garcia
Creating New Value from Laboratory Testing and Services in Value-Based Healthcare: Investigating Data Monetization Strategies from Clinical Laboratories

Jeremy S. Goodwin
(September, 2021)
Impact of Transformational Leader Behaviors on Diverse Team Performance and Persistence

Thomas Cowart Fleming Goolsby
(September, 2021)
System of Systems Composition and Course of Action Pathfinding Tool (CNCPT)

Vignesh Gopalakrishnan
Modeling the Trajectory of Bitcoin Using System Dynamics

Harsh Gupta
Using Product, Processes and Gamification to Motivate Users for Positive Habit Formation

Allison MacKenzie Harris
Designing an Educational Mindfulness Experience for Future Leaders

Christopher Nicholas Hein
(See also Naval E., Course II)
Quantifying Flexibility in Naval Ship Design

Matthew John Hernandez
(September, 2021)
Learning Through Others for System Level Performance

Javier Herrero
(February, 2022)
A System Architecture for the Digital Thread in the Design of Commercial Airplanes

R. Chadwick Holmes
(September, 2021)
Exploration and Production Risk Mitigation for Geothermal Adoption in the Energy Transition

Ricardo Bortot Hopker
A Canonical Experiment on System Complexity Metric and Its Impact on Engineering Management

Chieh Hsieh
An Integrated Design and Management Program for Taiwan

Kritisha Jain
(September, 2021)
Making Makerspaces More Accessible for People with Visual Impairment: Understanding User Needs to Reimagine Solutions

Sudhir Jain
Multiclass 3D Segmentation of Progressive Damage in Advanced Composites using Deep Learning.

Nicholas Albertus Jansen van Rensburg
(February, 2022)
Design of a Market Exchange for Climate Risk

Cristian Alfredo Junge Bascur
(September, 2021)
Deep Decarbonizaion of Texas: Impacts of High Electrification Scenarios

Zahra Kanji
(See also S.M., Course II)
Classification of Auscultation Sounds Using a Smart System

Jitt Kasemsri
Exploring the Impact of Play: Designing for Wellbeing through Digital Mediums for Older Adults in Thailand

Matthew Allen Kieke
(September, 2021)
Architecting a Corporate Venture Capital Firm for a Commodity Enterprise

Lakshmi Amrutha Killada
Understanding the Attitudes of Incumbent Manufacturing Workers toward Training Opportunities

Naoki Kobayashi
The Effect of Providing Subsidies for Vehicles and Infrastructures to Shift toward a Low Carbon Passenger Car Mix

ByeongJo Kong
(See also S.M., Course VI)
Analyzing Student's Problem-Solving Approaches in MOOCs Using Natural Language Processing

Nathan Eugene Krehbiel
Stakeholder Mental Model Alignment Influence on Mid-Stage Performance of New Product Engineering Teams

Aparna Ravikumar Kulkarni
Improving Electricity Supply in the Indian State of Odisha Using Under-the-Grid Micro-Grid Technology

Hemant Kumar
(February, 2022)
Hydrogen-Powered Cars: Is There a Role for Them in the Electrified U.S. Future?

Nihara Rachel Kurian
Empowering Caregivers: Design Solutions to Enhance Knowledge and Confidence in Care by Improving Communications with Health-Care Providers

John Nathan Landsberg
Systems Architecting a Space Force Enterprise

Rachel Helen Le Vély
(February, 2022)
Utilizing Enterprise Architecture Frameworks to Enable Successful Enterprise Transformation and Intended Enterprise System Emergence

Wei-Ching Lin
(February, 2022)
Socioeconomic Implication of Circular Economy: The Impact on Employment and Local Economy in the United States

John Chen-Chun Liu
Rethinking Consumption & Production - Systems and Lifestyle Emergence

Yuanbo Liu
(February, 2022)
When Technology Meets Patient Needs: Designing Mental Health Technology

Alessandro Lucioli
(February, 2022)
Exploration of Disruption from Digital Transformation through the ARIES Framework Enterprise Element Model

Jacob Timothy Lueders
Investigating Opportunities to Improve Service Member Access to Non-Clinical Mental Health Resources

Xueni Luo
(February, 2022)
Application of Agile Development and Innovative Technology in the Structural Engineering

Elias Augusto Machado Roberty
(September, 2021)
Predictive Analytics Applications for Oil and Gas Processing Facilities

Gautam Madhivanan
(February, 2022)
Applying Tradespace Exploration Methods to Remote Sensing System of Systems for Wildfire Detection and Management

Yuya Makino
Systems Thinking for Prioritizing Technology Research & Development in Public Administration

Indrayud Biswas Mandal
(September, 2021)
A Systems Approach for Creation of Cost-Effective Tactile Graphics for Use by Students with Visual Impairments from Low-Income Backgrounds for Greater Educational Outcomes

Cierra Danielle Martin
Everyone Needs a Seat at the Table: the Role of Participatory Design in Creating More Resilient & Equitable Food Systems

Jayanth Mohan Kumar
Evaluation of the Architecture for a Cable Actuated Robotic Platform for Agriculture as an Alternative to Existing Platforms

Mieko Murao
Designing Immersive Art Experience - An Exploration of Visuals and Sounds

Tyler C. Niday
Enabling Disruptive Technology in High Growth Organizations when Architecting an Enterprise

Hye Yeon (Hannah) Oh
No Pressure!: Designing Mobile Interventions to Improve Pressure Relief Adherence for Individuals with Spinal Cord Injury through Diary Studies

Tomohisa Okamoto
(September, 2021)
Comparative Analysis of Japanese and Western Corporate Venture Capital

Chinelo Shirley Onuoha
Telehealth in Sub-Saharan Africa: A Human-Centered Design Approach on Bridging Gaps in Healthcare and Wellbeing Across the African Diaspora

Monthep Parimontonsakul
(September, 2021)
An Analytical Approach to Automate Stratigraphic Correlation Using Well Logging Information

David Sejin Park
Characterizing and Evaluating Student Dropout through Understanding Student Journey in a MicroMasters Program

Liane Christine Peng
Encouraging Civic Engagement Through Playful Participatory Design

Stephen Jeffrey Pickett
(February, 2022)
Applying the Design Structure Matrix to Streamline the Development Process: Lessons from Marine Renewable Energy Development

Allison Mae Polly
(September, 2021)
Toward Achieving the Energy Transition Through Corporate-University Partnerships

Kelsey Lynn Prestidge
(February, 2022)
Digital Transformation in the Oil and Gas Industry: Challenges and Potential Solutions

Cassie Ann Raazi
(February, 2022)
(See also S.M., Real Estate Development)
The Value of Flexibility in Lease Duration

Karthik Rajasekaran
Integrated Design of Small Scale Third Generation Concentrated Solar Power Plants under Uncertainty

María Risueño Domínguez
Part of the Furniture: Envisioning Furniture Futures Through Qualitative Research and Design

Maxwell T. Robinson
(February, 2022)
Technology Roadmap for Mobile Early Detection System for Devastating Crop Diseases

Devaki Rani Sakhamuru
Techno-Economic Analysis and Strategic Decarbonization of the Indian Cement Industry

Tareq Saqr
(February, 2022)
Unsupervised Anomaly Detection with Application to Electric Motors

Olivia Wen Seow
(See also S.M., Course VI)
An Intuitive Tool for 3D Design Creation

Jennifer Elizabeth Shafer
Creating a Cross-Disciplinary Understanding of Legacy Stories – What Does It Mean to Share a Legacy and What Do Storytellers Need?

Yoshiki Shoji
Digital Transformation (DX) Ecosystem in Japan

Yuya Sugio
Investigating the dDsign of the Retail Payment System: Focusing on the Retail Payment Sector in Japan

Chun Hern Tan
(September, 2021)
Enterprise Architecting for Tacit Knowledge Transfer: Sustaining Competitive Advantage

Bagdat Toleubay
(September, 2021)
Process Improvement and Policy Analysis in Oil and Gas Well Development and Construction through Applications of System Engineering and System Dynamics Concepts

Yash Trivedi
Smart Home Technology Platform for the Aging Population

Jared D. Tuinstra
(February, 2022)
Speed Through Flexibility: Shortening the Acquisition Timeline of U.S. Defense Capabilities Using Flexible Systems

Ekaterina Tyshchenko
Designing Cooperative Data Exchanges: Overcoming Privacy and Business Challenges When Corporations Want to Collaborate Using Privacy-Preserved Data

Matthew Thomas Valcourt
(See also Naval E., Course II)
Naval Submarine Maintenance: An Examination of Areas of Potential Availability Execution Risk

Preeti Varma
Systems Thinking for Social Change

Anahí Vega Sanchez
From Linear to Exponential: How SMEs Can Define the Future of Emerging Markets

Kristen Marie Vilcans
Towards a Digital Engineering Initialization Framework

John Kirkpatrick Ward
(September, 2021)
A Systems Engineering Approach to Carbon Accounting Using System Theoretic Process Analysis (STPA)

Mengke Wu
Delving the "Self-Construction" in the Era of Social Media

Kerry Yujing Xie
Addressing Deficiencies in Asian American Pacific Islander (AAPI) Hate Crime Reporting: Designing a Solution for Community Needs

Kiyohide Yasuhara
A Study on the Impact of Collaboration between Power Systems and Electric Vehicles on the Costs and CO2 Emissions of Energy System

Serhiy Y. Yemets
(September, 2021)
Comparison of Discounted Cash Flow, Decision Analysis, and Flexibility in Design for Handling Uncertainty in Oil and Gas Capital Projects

Edmund Jiekwon Yoon
Autonomous Vehicle Implementation into Existing Garrison Infrastructure

Catherine Yu
Informational Analysis on US & China Platform Strategy: A Comparative Analysis

Yuru Zhang
Innovation Dynamics between Original Equipment Manufacturers (OEMs) and Tier-1 Suppliers in the Automotive Industry

Jonathan Pu Zhou
An IoT-based Pressure Injury Prevention System

Ye Zhu
Smart Remote Personal Health Monitoring System: Addressing Challenges of Missing and Conflicting Data

Master of Science in Transportation

Lauren Elspeth Craik
Course I
(See also M.C.P., Course XI)
Congestion Pricing: Moving from Equity Analysis to Transportation Justice

Ehab A. Ebeid
Course XI
(See also M.C.P., Course XI)
The Invisible Hand or the Handgun: Ride Hailing, Violence, and Political Settlements in the South African Urban Mobility Market

Patrick Stephen Meredith-Karam
Course XI
(September, 2021)
(See also S.M., Technology and Policy Program)
Exogenous Drivers of Public Transit and Ride-Hailing Ridership: A Study of Policy Intervention, COVID-19, and the Relationship between Ride-Hailing and Public Transit in Chicago

John Takuma Moody
Course I
(September, 2021)
An Optimization-Based Qualitative/ Algorithmic Approach to Transit Service Planning: Addressing the MBTA Green Line Extension

Joseph R. Noszek
Course I
Measuring Backtracking on Delivery Routes through Community Detection

Alexander Michael Salz
Course I
(September, 2021)
The Potential for Using Transportation Network Companies as an Alternative to Transit Station Parking

Naval Engineer
Course II
Department of Mechanical Engineering

Elliot James Collins
(See also S.M., Engineering and Management)
A Method for Organized Institutional Learning in the Navy Shipbuilding Community

Megan Jené Hagen
(See also S.M., Course II)
Feasibility Analysis for a Nuclear-Powered Commercial Merchant Ship

Christopher Nicholas Hein
(See also S.M., Engineering and Management)
Quantifying Flexibility in Naval Ship Design

Dayne Michael Howard
(See also S.M., Course II)
Quantifying Extreme Event Statistics for Ship Motions and Loads Using Low-Fidelity Models and Recurrent Neural Networks

Joshua James Malone
(See also S.M., Course II)
The Impact of Electrical Standards on MVDC Shipboard Power Cable Size

Scott David Oberst
(See also S.M., Course II)
Investigation into the Design of High-Power Plug-In Shipboard Electrical Connectors

Christopher Matthew Antonio Reynolds
(See also S.M., Course II)
Relationship of Mechanical Deformations and Electrochemical Properties of Lithium Ion Batteries-An Experimental Study

Matthew Thomas Valcourt
(See also S.M., Engineering and Management)
Naval Submarine Maintenance: An Examination of Areas of Potential Availability Execution Risk

Kelli Michelle Waterman
(See also S.M., Course II)
Microchannel Thermal Management Analysis and Simulation Tool for Integration into Electronic Component Design

Engineer in Computer Science
Course VI
Department of Electrical Engineering and Computer Science

Matthew Arthur Kilgore
(February, 2022)
Fast Reducer Hyperobjects

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES

Master of Applied Science in Data, Economics, and Development Policy
Course XIV
Department of Economics

Pavarin Bhandtivej
(September, 2021)

Raúl A. Castro Corona
(September, 2021)

Juan Carlos Cisneros
(September, 2021)

Megan Nicole Farrell
(September, 2021)

Jannis O. Hamida
(September, 2021)

Sui Yuan Han
(September, 2021)

Wonjae Lee
(September, 2021)

Adrienne Boehlert Luczkow
(September, 2021)

Devin Whetstone Mauney
(September, 2021)

Andrés L. Parrado
(September, 2021)

Adrien Paul Marius Rose
(September, 2021)

Ashley Vicary
(September, 2021)

John Henry Walker
(September, 2021)

Master of Science in Political Science
Course XVII
Department of Political Science

Emma Mary Campbell-Mohn
(February, 2022)
Paying for the Bomb

In Hee Kang
(September, 2021)
Group Heterogeneity and Affective Polarization within the Democratic Party

Helen Landwehr
(See also S.M., Technology and Policy Program)
Analyzing the Usability of Natural Language Processing for Detecting Disinformation Tactics, Techniques, and Procedures

Master of Science in Science Writing
Course XXIW
Program in Writing and Humanistic Studies

Anna Derby Blaustein
(September, 2021)
The Long Run: Inside the Race to Keep Young Female Runners Healthy and Performing at the Top of their Game

Robert M. Davis III
(September, 2021)
I, Dentist: Is Artificial Intelligence the Future of Oral Healthcare?

Alison Jordan Gold
(September, 2021)
Battle for the Dinner Table: Can Vegan Analogues Curb America's Reliance on Meat?

Elizabeth Anne Gribkoff
(September, 2021)
Caught in the Crosswinds: Rural America Could be Renewable Energy's Nemesis — or Its Savior

Kelsey Danielle Harper
(September, 2021)
"That Could Have Killed Me." How Anti-Fat Bias Can be Dangerous, Even Deadly, for Heavier Patients

Zain Humayun
(February, 2022)
Building a Better Internet

Alice Downing McBride
(September, 2021)
As the Starling Flies

Saima May Sidik
(September, 2021)
Humans Among the Clouds

Nafisa Syed
(September, 2021)
Bridging the Gaps between Screens: Can Telehealth Bring Mental Healthcare to Those Who Need It?

Master of Science in Linguistics
Course XXIV
Department of Linguistics and Philosophy

Devon Brett Denny
Diné Bizaad Bitsisiléí Bóhoo'aah: A Basis for Learning Navajo.

Master of Science in Comparative Media Studies
Program in Comparative Media Studies

Laurel Anne Carney
Wall-Walking and Other Bannable Offenses: Discipline and Deviant Play in World of Warcraft

Emily Elizabeth Grandjean
Bodies, Land, and Instagram: Networked Foraging and Infrastructural Media in the United States

Tomás Andrés Guarna
Trust Machines: Cryptocurrencies, Blockchains, and Humans In Cultures of Mistrust

Jay Jaeger Hawke
Creation Through Destruction: Artifacts of Worldbuilding in Experiential Legacy Games

Alison Katrina Lanier
The Rendered Body: Queer Utopian Thinking in Digital Embodiments

G. R. Marvez
Controversial Science Argumentation Skills for Teachers in the Digital Clinical Simulation *Discussion Leader*

SLOAN SCHOOL OF MANAGEMENT

Master of Business Administration
Course XV-A (Sloan Fellows)
Sloan School of Management

Arvindan Badrinarayanan

Toluwase Olaolu Adesina

Gideon Majiyebo Adogbo

Rajan Aggarwal

Omolara Olusola Ajele

Guillermo Altenhordt

Mohammad Jamal Ashraf

Bhuvan Prasad Atluri

Purushottam Ram Nath Awasthi

Tomas D Andrea Balistiero

Yitzhak Balmas

Sebastian Julio Barriga Bermeo

Mohamed Riad Benchabane

Omar Benzit

Partha Biswas

Chelsea Holland Borchers

Gonzalo Brahm, Sr.

Mario Carandente

Mark Andrew Ballard Castleman

Gaurav Chadha

Samuel Christian Sy Chan

Manuel Gonzalo Chavez Anyosa

Daniel Cástulo Chávez Paniagua

Yoon Young Chung

Danilo Gabriel Ciccola

Paul Aaron Cole III

Candice Dawn Creecy

Jose Alfonso de la Campa

Pablo Delclaux Aznar

Gaurav Shekhar Deshpande

Anupam Dey

Michael Thomas Ernst

Boaz Fachler

Lindelwa Farisani

Benedicte Olivia Febe

Omer Feller

Carolina Soares Porto Fonseca

Alon Elazar Fooks

Christopher Glen Locandro Fort

Carmelo Graziano Gallitto

Nayelli García Ávalos

Felipe Gaviria

Ruben Ramon Grau Pujol

Amit Gupta

Erasmus Gyabaah-Frempah

Shiro Hatase

Junichi Hirokawa

Hisaya Hirose

Daisuke Ikegami
Can Traditional Japanese Companies Reinvigorate Middle Managers to Improve Their Competitive Advantages in a World of Uncertainty?

Jordan Bradley Jakubovitz

Adela Spring Jamal

Oloruntosin Tolulope Joel

Clayton Graham Jones

Anuja Kadian

Takeshi Kai

Pedro Esteban Kam Paw Molina

Maneet Kamboj

Ali Khedery

Sho Kikuchi

Hiroki Kiyoto

Amara Mohamed Konneh

Edgar Andrés Lazo Paz

Sea Young Ethan Lee

Wei Yang Lee

Arthur Rodrigues Lima

Yanbin Lin

Michael William Lipton

Kay Yin Regina Low

Huimin Ma

Ko Maeda

Mohit Malhotra

Salvador Enrique Martínez Corona

Supriya Medapati

Javier Enrique Méndez Bonilla

Ashlea Ann Meyer

Paul Joseph Miller

Taizo Miyato

Friedrich Andreas Moeckel, MD

Roberto Molina

Clifford Reginald Nau

Guillaume A. E. G. Navez

Hidefumi Nogami

James Michael O'Mara

Gemma Odena Bultó

Kazumi Ohno

John Bosco Acot Okello

Hock Boon Ong

MingHsin Pai

Nishant Pandey

Gyorgy Paris
(February, 2022)

William Adam Parrish

Mikael Petrosyan

Harsha Vardhini Pogunul Srinivasalu

George David Potts

Meera Ravi

Shuyang Ren

Philippe Anton de Castro Ricafort

Juan Sebastián Roda Vivas

Efren Romero Benavente

Bryan Robert Rother

Jaime Rubén Sáez Galleguillos

Yukari Saiki

Satoru Saito

Yu Sakamoto

Hiroyuki Sera

Puneet Shah

Vikram Vikas Sharma

Evgeny Sheenko

Charles Sutton Siedlecki, Jr.

Vitor Silveira Bueno

Adam Robert Sinovsky

Tomohito Soyama

Padmapriya Srinivasan

Ioannis Stathis

Alexandra Isabel Suarez

Takuya Takagi

Toshio Taki

Teruhisa Tsuji

Horacio Manuel Vaccare Fuster

Manuel Jesus Velasquez Ruiz, Sr.

Meera Venu

Ricardo A. Villalba

Tarunpreet Walia

Taro Watanabe

Patrick Daniel Wegner

Sara Elena Williams

Aileen Wong

Itay Yehuda Yamin

Rodrick Ybanez

Seungho Yoon

Sosuke Yoshikawa

Luyang Zhang

Yuqing Zhang

Master of Business Administration

Course XV-E (Executive)
Sloan School of Management

Heba Samy Abdelbaky

Hardeep Singh Ahluwalia

Jose Alonso Albarracin Rodriguez

Cedric Francois Alexanian

Sabreen Syeda Alikhan

Jean Carlos Alonso Gomez

Bharatheesh K. Ananth

Franklin Enrique Angulo Fernandez

Allen Todd Atchley

Alexey Vladimirovich Avdokhin

Saurabh Awasthi

Ryan Joseph Bachman

Adil Bahadoor

Krishna Chaitanya Balantrapu

Antonio Jermaine Barnes

Justin Alexander Bass

Ryan Raymond Beaudry

Jeffrey Beligotti

Miriam A. Bredella

Robert Douglas Bruce

Alejandro Canete Baez

Rachel Peters Card

Kala Chandramouli

Melissa Roberts Chapman

Che-Wen Chen

Celine Kaouthar Cherif Torzsok Marsiglia

Kevin Cheung

Thomas Arthur Seydou Coulibaly

Christy Fernandez Cull
Optimizing Pricing for Smart Garments

Mitu Dahiya

Joseph Henry Dayan

Vanessa M. DeGennaro

Lauren Nahir De Jesús

Gaurav Dhir

Abid Ali Dobani

Tolga Durak

Brian Aden Edge

Rhamey Abdelmonem Elhosseiny

Anthony Angelo Enzor-DeMeo

Melissa Anne Estok

Cleidy Liborio Fernandes

Belen Fraile Ortiz

Phani Gadde

Cayetano Gea-Carrasco

Naji Gehchan

Erin-Michael Gill

Jason Aaron Gluck, DO

Lisa Goel

Ismael Gomez Charles

Julie Diana Grosvenor

Daphne Adele Haas-Kogan

Ellen Catherine Handly

Matthew Boyd Harrington

Melissa Lee Herman

Amy Lynn Herzog

Christopher Hoye

Jillian J. Irizarry

Casey Adam Jackman

Farukh Javed

Jennifer Johns

Richard J. Johnson

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How Can You Take a Business Model and Apply across Different Industry?

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Enabling Proactive Quality in Commercial Airplanes Using Natural Language Processing

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Equipment Installation Quality Improvement

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Framework and Analytics for Emissions Forecasting and Planning

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Automating Data-Driven Decisions to Improve Key Financial and Operational Metrics in Semiconductor Manufacturing

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Operations Strategy for the Mass Customization of Additively Manufactured Anatomical Models, Surgical Guides, and Implants

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Capacity Multipliers: Rapidly Scaling Production through Line Balancing and Critical Path Reduction

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How Enhanced Data Availability Affects Multi-Channel Marketing Attribution

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Optimizing the Supply Chain Design for Sourcing and Supply of Critical Materials

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Prototyping of Injection EVA Foam Footwear Midsoles

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(See also S.M., Operations Research)
Sequential Optimization for Prospective Customer Segmentation and Content Targeting

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Supply Chain Sustainability Opportunities in the Utility Industry

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Digital Thread and Analytics Model to Improve Quality Controls in Surgical Stapler

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The Playbook - A Novel Approach to Identifying Opportunity for on Machine Measurement and Adaptive Machining Projects

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Oversized Package Placement Optimization in Warehouses

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(See also S.M., Course VI)
Fulfillment Simulation and Inventory Location Optimization

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Streamlining Financial Analysis for Novel Robotics Concepts

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Automation of NC Programming with Artificial Intelligence

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Short Duration Job Scheduling and Assignment Using Staged Mixed Integer Programs

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Enabling Growth in a Middle-Market Job Shop Environment

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Improving Operational Efficiency of a Small Manufacturing Maintenance Organization

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(See also S.M., Course II)
Optimizing Demand Re-Allocation under Fixed Capacity Commitments

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(See also S.M., Course I)
Evaluating Strategies for Wide Scale Replacement of Human Inspection with Machine Vision

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Advanced Functionality of Digital Mining Predictive Analytics & Insights Platform

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Advancing Replenishment Efficiency Utilizing Unit of Measure and Planogram Settings

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Production Network Capacity Modeling for Strategic Network Planning

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Effects of Standardization in a Developing Manufacturing Environment

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Accelerating Adoption of Large-Format Additive Manufacturing in Aerospace Tooling

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(See also S.M., Course VI)
Analytics to Make Hybrid Work, Work

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Operations Strategy for Evolving Customer Profiles

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Developing a Decision-Making Framework for Carbon: Incorporating Carbon into Optimized Business Objectives

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End-to-End Artificial Intelligence Lifecycle Management

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(February, 2022)

Xiaoming Xu
(February, 2022)

Minglang Yang
(February, 2022)

Xiaonuo Yang
(February, 2022)

Jiayi Yao
(February, 2022)

Lingyun Ye
(February, 2022)

Banglu Yu
(February, 2022)

Huiwen Zhang
(February, 2022)

Lanxin Zhang
(February, 2022)

Xitong Zhang
(February, 2022)

Yujia Zhang

Yuqing Zhang
(February, 2022)

Zhibo Zhang
(February, 2022)

Junxiang Zhao
(February, 2022)

Yayu Zhu
(February, 2022)

Tian Zhuang
(February, 2022)

Master of Science in Management Studies
Course XV-S
Sloan School of Management

Hendrik Bründermann
Managing Diversity in the Modern European Workplace

Cheng Cheng
How to Improve the Performance of M&As: From the Cultural Clash Perspective

Marie Destailleur
Biodiversity and Business: Who Will Save Whom?

Gaspard Benoit Gilles Fouilland
Sigma Ratings Case Study

Xiaojing Guo
Accounting Frauds of Chinese Public Companies on the US and Chinese Stock Exchanges

Liuning He
Mobile-Payments in U.S. and China

Thanasak Hoontrakul
Review of US Business Models in Longevity Economy and Strategy Recommendation for the Thai market

Sharan Jammanahalli Mahesh
Agritech Innovations in India

Shu Ran Li
A Study of Livestream Shopping's Role in the Customer Journey

Sipei Li
Cloud Service Strategies and Competition in the Chinese Market Among Major Technology Companies

Boyan Liu
Artificial Intelligence and Machine Learning Capabilities and Application Programming Interfaces at Amazon, Google, and Microsoft

Dahai Liu
Redesigning Marketing for Traditional Chinese Medicine Clinics in China

Kaiwen Liu
Price Competition Reduction Strategies in Chinese B2C E-Commerce Markets: A Case Study

Jizheng Luan
Reform of Chinese-Stated Entities in Financial Sector

Margaret Wright McLeod
Venture Capital and Human Capital Patterns in Dual Use Hardware Startups in the United States and United Kingdom

Maximilian Pagel
Meat No Longer Requires Animal Slaughter – Valuing an Alternative Protein Player

Pedro Alonso Sanabria Pardo
New Growing Businesses: Vendors Call Option to Sustain Growth

Inderpreet Singh
Integrating ESG Factors to Equity Valuation

Chongyang Wang
The Attraction of China's Deep Tech Entrepreneurial Ecosystem for Chinese STEM Ph.D. Students Studying in the United States to Start Their Own Businesses Back Home

Cong Wang
A Financial Model to Assist New Therapeutics Development Decision Making

Miao Xu
Analysis of Changes in the Investment Strategies of Real Estate Funds for Multi-Family /Single-Family Houses After the Pandemic

Xi Yang
Internet Hospitals in China - Exploration of Business Models and Marketing Strategies

Master of Science in Management of Technology
Course XV-A
Sloan School of Management

James Yin Bon Man
Towards the Future of Work: Managing the Risks of AI and Automation

Saraswatula Venkata Aditya
Business Value of Enterprise Digital Architecture

Master of Science in Management Research
Course XV
Sloan School of Management

Patrick Augustine Adams
Jünger Can't Borrow: Demographic Imbalances and Currency Risk Premia

Jennifer Nancy Lee Allen
Scaling Up Fact-Checking Using the Wisdom of Crowds

Samuel Sobel Anderson
(February, 2022)
Reading Between the Lines: The Information Content of Financial Statement Disaggregation

Kunho Baik
(September, 2021)
Private Equity, Disclosure Quality, and Audit Quality

Marat Ibragimov
Customer Search and Product Returns

Keyan Li
Targeting Seasonal Marketing Campaigns: Rebalancing Exploration and Exploitation

Alex Vernon Moehring
(February, 2022)
News Feeds and User Engagement: Evidence from the Reddit News Tab

Fiona Paine
Big Data and Firm Risk

Eppa Rixey V
Legitimacy-Centric Regulatory Disruption: Revitalizing Communities and Competition in a Mature, Regulated Market

Mariia Tiurina
Tornado in Credit Desert: the Role of Consumer Credit Access in the Disaster Recovery, Evidence from Arkansas

Emma Benz van Inwegen
More Choices or Help Choosing?: Experimental Evidence on Helping Firms Hire

Gabriel Medaglia Voelcker
Persistent Costs of Disclosure Exemption Regulation

Rachel Seou Yoon
Taxes and Product Market Outcomes: Asymmetric Effects of Tax Cuts on Winners v. Losers

Alan Zhang
(September, 2021)
Regenerative Coordination: Working for a Living Service

Master of Science in Operations Research

Sloan School of Management in conjunction with the Schwarzman College of Computing

Lindsey Blanks
Operational Scheduling of Deep Space Radars for Resident Space Object Surveillance

Ken Groszman
(See also M.B.A., Course XV)
Sequential Optimization for Prospective Customer Segmentation and Content Targeting

Samuel Stone Humphries
Analytics for a Carbon-Free World

Yumeng Niu
Optimal Targeting Under Gender Fairness

Stanislav Ivaylov, Slavov
Causal Inference: Heterogeneous Effects and Non-stationary Environments

Paige Melendy Wyler
(See also M.B.A., Course XV)
Developing a Decision-Making Framework for Carbon: Incorporating Carbon into Optimized Business Objectives

SCHOOL OF SCIENCE

Master of Science in Chemistry
Course V
Department of Chemistry

Aaron Liu
Site-Selective C-H Bond Diversification of Glycosides

Alexander Edward Seim
Catalytic Reactions of Organoboranes

Master of Science in Biology
Course VII
Department of Biology

Kathleen Whitmore Higgins
(September, 2021)
PRMT5 Inhibitors in Merkel Cell Carcinoma

Master of Science in Microbiology
Course VII
Department of Biology

Samantha Leigh Edelen
(September, 2021)
Exploring Protoheme IX Farnesyltransferase as an Antimalarial Drug Target.

Master of Science in Physics
Course VIII
Department of Physics

Suzannah Alcyone Fraker
(February, 2022)
Deep Learning for the KamLAND-Zen Search for $0\nu\beta\beta$

Yuki Tatsumi
(September, 2021)
Magneto-Thermal Transport and Machine Learning-Assisted Investigation of Magnetic Materials

Master of Science in Brain and Cognitive Sciences
Course IX
Department of Brain and Cognitive Sciences

Paloma Sánchez-Jáuregui Ramírez
(September, 2021)
Microfluidics for Calcium Imaging of C.elegans Neurons During Temporally Precise Odor Stimulation

Master of Engineering in Computation and Cognition
Course VI-9
Department of Brain and Cognitive Sciences

An Jimenez
Predicting Cognitive Reflection from Digital Fingerprints

Jason Madeano
Learning to Solve Complex Tasks by Growing Knowledge Culturally across Generations

Master of Science in Earth and Planetary Sciences
Course XII
Department of Earth, Atmospheric, and Planetary Sciences

Elise Margaret Cutts
Marine Carbohydrate-Active Enzymes Illuminate Microbial Ecology, Evolution, and Carbonate Precipitation

Megan Elisabeth Guenther
Origin of the Lunar Ultramafic Glasses Constrained by Experiments and Models

Mathilde Emilie Pauline Wimez
Systematic Exploration of a Volcanic Long-Period Earthquake Swarm with a Recursive Matched-Filter Search

AWARDED JOINTLY WITH THE WOODS HOLE OCEANOGRAPHIC INSTITUTION

Master of Science in Mechanical Engineering

Daniel Wilson Goodwin
Course II
(September, 2021)
Environmental Effects of the Beaufort Lens on Underwater Acoustic Communications during Arctic Operations

Jacob Peter Heuss
Course II
(September, 2021)
Reduced Order Modeling for Stochastic Prediction and Data Assimilation Onboard Autonomous Platforms at Sea

Bradli Anne Howard
Course II
(September, 2021)
Multi-Path Penalty Metric in Underwater Acoustic Communication for Autonomy and Human Decision-Making

Jesse Rowe Pelletier
Course II
(February, 2022)
Human-Autonomy Teaming for Improved Diver Navigation

Master of Science in Marine Geology and Geophysics

Faith Joan Duffy
Course XII
An Inverse Modeling Approach to Investigate Deep Ocean Ventilation from Radiocarbon Records

Master of Science in Physical Oceanography

Timothy Ryan Getscher
Course XII
(September, 2021)
Observing and Quantifying Kinematic Properties and Lagrangian Coherent Structures of Ocean Flows using Drifter Experiments

Kyle Robert Kausch
Course XII
(September, 2021)
Characterizing the Impact of Underwater Glider Observations on the Navy Coastal Ocean Model (NCOM) in the Gulf Stream Region

Peter Albert Roemer
Course XII
(September, 2021)
Stratification Dynamics in the Beaufort Gyre

SCHOOL OF ARCHITECTURE AND PLANNING, DOCTORAL

Doctor of Philosophy

School of Architecture and Planning

Ishwarya Ananthabhotla
(February, 2022)
Thesis in the field of Media Arts and Sciences: Cognitive Audio: Enabling Auditory Interfaces with an Understand of How We Hear

Yu Qian Ang
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: Using Urban Building Energy Modeling to Develop Carbon Reduction Pathways for Cities

Isadora Araujo Cruxên
(February, 2022)
Thesis in the field of Political Economy, Development and Planning submitted to the Department of Urban Studies and Planning: Disordering Capital: The Politics of Business in the Business of Water Provision

Alpha Yacob Arsano
(February, 2022)
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: Climate--Carbon--Equity: Making Sustainable Design Concepts Accessible for All

Norhan Bayomi
(September, 2021)
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: Heat Vulnerability and Risk Analytics for the Built Environment

Andrew David Richmond Binet
(September, 2021)
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Making the City Livable: Caregiving and Health in Gentrifying Boston

Johnna Cressica Brazier
(September, 2021)
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Mobile Carbon Footprinting: Sensing and Shaping the Carbon Emissions of Daily Activities Using Digital Technologies

Joy Adowaa Buolamwini
(February, 2022)
Thesis in the field of Media Arts and Sciences: Facing the Coded Gaze with Evocative Audits and Algorithmic Audits

Colleen Chiu-Shee
(September, 2021)
Thesis in the field of Urban and Environmental Planning and Design submitted to the Department of Urban Studies and Planning: Ecological City Design and Planning: How China Expands Urban Ecology, Institutional Learning, and Cultural Shifts through the Evolving Eco-Developments

Eric Chu
(February, 2022)
Thesis in the field of Media Arts and Sciences: Learning Human Beliefs with Language Models

Walker Peterson Downey
Thesis in the field of Architecture: History and Theory of Art submitted to the Department of Architecture: Resonant Bodies: Pauline Oliveros, David Tudor, and Music Mediated, 1950–1980

Abhimanyu Dubey
(February, 2022)
Thesis in the field of Media Arts and Sciences: Private and Provably Efficient Federated Decision-Making

Jesse Noah Feiman
(February, 2022)
Thesis in the field of Architecture: History and Theory of Art submitted to the Department of Architecture: Adam von Bartsch (1757-1821) and the Invention of the Original Printmaker

Paloma Francisca Gonzalez Rojas
(September, 2021)
Thesis in the field of Architecture: Design and Computation submitted to the Department of Architecture: Machine Learning Simulation of Pedestrians Exploring the Built Environment

Daniel Robert Goodwin
(February, 2022)
Thesis in the field of Media Arts and Sciences: Highly Multiplexed Molecular Mapping of Biological Samples via Integrated Experimental and Computational Technologies

Alexis Hope Gottlieb
(September, 2021)
Thesis in the field of Media Arts and Sciences: Designing Hackathons for Justice and Joy: Participatory, Narrative, and Artistic Approaches

Charles Joseph Holbrow
(September, 2021)
Thesis in the field of Media Arts and Sciences: Fluid Music

Kristina Teresa Johnson
(September, 2021)
Thesis in the field of Media Arts and Sciences: Foundations of Full-Stack Neuroscience for Neurodiverse Individuals via Personalized, Naturalistic Studies

Shannon Leigh Johnson
Thesis in the field of Media Arts and Sciences: Simultaneous, Large Multi-Gene Delivery for Implementation of Fluorescent Reporter Spatial Multiplexing to Image Signaling Pathways

Johnathan J. Kongoletos
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: Airflow in Interior Spaces: Implications on Comfort and Health

Eman Abdelhalim Lasheen
Thesis in the field of Urban Planning and International Development submitted to the Department of Urban Studies and Planning: Against the Grain: A History and Policy Analysis of Rice, Water and the Edible Landscape in Egypt

Albert José Antonio López
(September, 2021)
Thesis in the field of Architecture: History and Theory of Architecture submitted to the Department of Architecture: The Integrated State: Architecture, Planning, and Politics in Mexico, 1938-1958

Mostafa Mohsenvand
(February, 2022)
Thesis in the field of Media Arts and Sciences: Classifying and Displaying Brain-Waves through Self-Supervised Learning

Ken Nakagaki
(September, 2021)
Thesis in the field of Media Arts and Sciences: 'Shells' and 'Stages' for Actuated TUIs: Reconfiguring and Orchestrating Dynamic Physical Interaction

Ariel Noyman
Thesis in the field of Media Arts and Sciences: CityScope: An Urban Modelling and Simulation Platform

Daniel David Oran
(September, 2021)
Thesis in the field of Media Arts and Sciences: Implosion Fabrication: Rethinking 3D Nanofabrication from First Principles

Athina Papadopoulou
(February, 2022)
Thesis in the field of Architecture: Design and Computation submitted to the Department of Architecture: Affective Matter: A Haptic Material Modality for Emotion Regulation and Communication

Andrew Colin Payne
(September, 2021)
Thesis in the field of Media Arts and Sciences: Scalable Methods for Spatial Genomics

Rida Qadri
(February, 2022)
Thesis in the field of Computational Urban Science submitted to the Department of Urban Studies and Planning: Drivers of Disruption: How Jakarta's Mobility Platform Drivers Understand, Transform and Resist the Algorithms that Manage Them

Carlos Emilio Sandoval Olascoaga
(September, 2021)
Thesis in the field of Architecture: Design and Computation submitted to the Department of Architecture: Drawing Participation: Histories of Geospatial Computing, Professional Silos, and Computational Potentials for Collaboration in Planning and Design

Dorothy Shun Wai Tang
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Infrastructural Landscapes: The Technopolitics of Watershed Planning in Asia

Laura Sara Wainer
(February, 2022)
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: The Informalization of Formal Housing Projects in the Global South: Policy Failure or Counterhegemonic City-Making?

ElDanté Christopher Winston
Thesis in the field of Architecture: History and Theory of Architecture submitted to the Department of Architecture: Power and Punishment: Architecture and Violence in the Italian Renaissance

SCHWARZMAN COLLEGE OF COMPUTING, DOCTORAL

Doctor of Philosophy

Schwarzman College of Computing

Paolo Mikael Bertolotti
(February, 2022)
Thesis in the field of Social and Engineering Systems and Statistics submitted to the Institute for Data, Systems, and Society: Inference and Diffusion in Networks

Eaman Jahani
(February, 2022)
Thesis in the field of Social and Engineering Systems and Statistics submitted to the Institute for Data, Systems, and Society: Network Effects on Outcomes and Unequal Distribution of Resources

Bomin Jiang
(September, 2021)
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Identification and Robustness in Central Banking and Supply Chain

Hanwei Li
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Estimation and Optimization in Online Marketplaces

Minghao Qiu
(September, 2021)
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Impacts of Energy and Environmental Policies on Air Quality: Bridging Observational Data, Statistical, and Atmospheric Models

Manxi Wu
(September, 2021)
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Information, Learning, and Incentive Design for Urban Transportation Networks

Qi Yang
(September, 2021)
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Partisanship, Friendship, and Censorship in Online Social Networks

Yuan Yuan
(September, 2021)
Thesis in the field of Social and Engineering Systems and Statistics submitted to the Institute for Data, Systems, and Society: Understanding and Reshaping Social Networks with Advanced Computational Techniques

SCHOOL OF ENGINEERING, DOCTORAL

Doctor of Science

School of Engineering

Oliver Jia-Richards
Thesis in the field of Space Propulsion and Controls submitted to the Department of Aeronautics and Astronautics: Exploration of Planetary Bodies with Electrospray Thrusters

Suhas Subramanya Kowshik
Thesis in the field of Electrical Engineering and Computer Science: Non-Asymptotic Behavior in Massive Multiple Access and Streaming System Identification

Joshua Ka-Wing Lee
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Maximal Correlation Feature Selection and Suppression with Applications

Benjamin Lienhard
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Machine Learning Assisted Superconducting Qubit Readout

Catherine Aiko Lockton
(September, 2021)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Quantum State Discrimination with Overcompleteness

Aramael Andrés Peña-Alcántara
Thesis in the field of Civil Engineering and Computation submitted to the Department of Civil and Environmental Engineering: A Subject Based Methodology for Measuring Interclass Bias in Facial Recognition Verification Systems'

Gianluca Roscioli
(February, 2022)
Thesis in the field of Materials Science and Engineering: Failure of Martensitic Sharp Edges: A Micro-Mechanical Exploration for Design Guidelines

Oscar A. Viquez Rojas
Thesis in the field of Mechanical Engineering: Vehicle Autonomy Under the Arctic Ice: Environmental Adaptation through Model-Aided Machine Learning

Shaolou Wei
(February, 2022)
Thesis in the field of Materials Science and Engineering: Overcoming the Limits of Strain-Induced Martensitic Transformation in Metastable Face-Centered Cubic Alloys

Doctor of Philosophy

School of Engineering

Navid Abedzadeh
Thesis in the field of Electrical Engineering and Computer Science: Techniques for Reducing Beam-Induced Damage in Electron Microsco

Weeraratna Patabendige Maleen Hasanka Abeydeera
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Scalable and Broad Hardware Acceleration through Practical Speculative Parallelism

Youssef Medhat Aboutaleb
(February, 2022)
Thesis in the field of Econometrics and Statistics submitted to the Department of Civil and Environmental Engineering: Theory-Constrained Data-Driven Model Selection, Specification, and Estimation: Applications in Discrete Choice Models

Sara Achour
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Compilation Techniques for Reconfigurable Analog Devices

Angela Josephine Acocella
(February, 2022)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Alternative Freight Contracts: Data-Driven Design Under Uncertainty

Adedayo Olumayowa Aderibole
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Power Line Communication for Low-Data-Rate Energy Control

Akshat Agarwal
(September, 2021)
Thesis in the field of Aerospace, Energy, and the Environment submitted to the Department of Aeronautics and Astronautics: Quantifying and Reducing the Uncertainties in Global Contrail Radiative Forcing

Anish Agarwal
Thesis in the field of Electrical Engineering and Computer Science: Causal Inference for Social and Engineering Systems

Shashank Agarwal
Thesis in the field of Mechanical Engineering: Reduced-Order Modeling of Granular Intrusions Driven by Continuum Approaches

Yash Agarwal
Thesis in the field of Biological Engineering: A Materials-Based Approach for Localized Delivery of Cancer Immunotherapy

Alexa Christine Aguilar
Thesis in the field of Aeronautics and Astronautics: Multiple Simultaneous Optical Links for Space-Based Platforms

Sebastian Gerd Ahling
(September, 2021)
Thesis in the field of Mechanical Engineering: Elements of Lubricant Transport Critical to Piston Skirt Lubrication and to Leakage into the Piston Ring Pack in Internal Combustion Engines

Haluk John Akay
Thesis in the field of Mechanical Engineering: Representing Knowledge for Data-Driven Design

Karthik Akkiraju
(February, 2022)
Thesis in the field of Materials Science and Engineering: Trends in C-H Bond Dehydrogenation Energetics for Small Molecule Conversion

Mohammad S Kh F Sh AlAdwani
(September, 2021)
Thesis in the field of Civil and Environmental Engineering: On Equilibria and Feasibility of Ecological Polynomial Dynamical Systems

Keenan Eugene Sumner Albee
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: Online Information-Aware Motion Planning with Model Improvement for Uncertain Mobile Robotics

Omar Abdulfattah AlDajani
Thesis in the field of Geotechnical and Geoenvironmental Engineering submitted to the Department of Civil and Environmental Engineering: Hydraulic Fracturing Behavior of Opalinus Shale: A Framework, Experimentation & Insights

Fahad Alhasoun
(September, 2021)
Thesis in the field of Computational Science and Engineering submitted to the Department of Civil Engineering and Environmental Science: Towards Generalization of Models on Streets Imagery: Methods and Applications

Giulio Alighieri
(February, 2022)
(See also S.M., Course X-A)
Thesis in the field of Chemical Engineering: Scaling up Genetic Circuits in Mammalian Cells: A U1-snRNA-based Platform Enables Mammalian Cells to Compute the Bitwise Inversion of the Square Root of a Number

Gregory William Allan
Thesis in the field of Aeronautics and Astronautics: Phasing of Ground-based Optical Arrays for Space Applications

Tarfah Alrashed
Thesis in the field of Electrical Engineering and Computer Science: Systems to Democratize and Standardize Access to Web APIs

Scott Thomas Alsid
Thesis in the field of Nuclear Science and Engineering: High-Sensitivity Nitrogen Vacancy Center Magnetometry: From DC to GHz

Alexander A. Amini
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: End-to-End Learning for Robust Decision Making

Wei An
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Guessing Random Additive Noise Decoding(GRAND), from Performance to Implementation

Melodi N. Anahtar
(February, 2022)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Protease Activated Nanosensors for the Noninvasive Diagnosis of Community-Acquired Pneumonia

Daniel Allen Anderson
(September, 2021)
Thesis in the field of Biological Engineering: Competition-Based CRISPR-dCas9 Transcriptional Control Mechanisms and Application of dCas9 Biosensors for Highthroughput, Cell-Based Protease Inhibitor Screens

Nina Andrejevic
(February, 2022)
Thesis in the field of Materials Science and Engineering: Machine Learning-Augmented Spectroscopies for Intelligent Materials Design

Ian Wayne Andrews
Thesis in the field of Biological Engineering: Approaches to Investigating Antibiotic Efficacy and Discovery of Treatment Strategies against Antibiotic Tolerance

Marc-Joseph Antonini
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Customizing Multifunctional Bidirectional Neural Interfaces through Fiber Drawing

Minoru Brandon Araki
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Learning to Plan by Learning Rules

Sujay Dilip Bagi
(September, 2021)
Thesis in the field of Mechanical Engineering: High-Throughput Synthesis of Metal–Organic Frameworks in a Continuous Flow Reactor

Nathaniel K. Bailey
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Dynamic Ridesharing under Travel Time Uncertainty: Passenger Preference and Optimal Assignment Methods

Akash Bajaj
(February, 2022)
Thesis in the field of Computational Materials Science and Engineering submitted to the Department of Materials Science and Engineering: Improving First-Principles Based Methods for Correlated Materials Modeling

Sean Bozkurt Ballinger
Thesis in the field of Applied Plasma Physics submitted to the Department of Nuclear Science and Engineering: Modeling of Boundary Transport and Divertor Target Heat Flux - Implications for Advanced Divertor Concepts

Yujia Bao
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Efficient and Robust Algorithms for Practical Machine Learning

Ricardo Miguel Santos Baptista
Thesis in the field of Computational Science and Engineering: Stochastic Modeling and Likelihood-Free Inference Using Triangular Transports

Marc Barbar
Thesis in the field of Electrical Engineering and Computer Science: Decision-Making Under Uncertainty for Electric Power System Operation and Expansion Planning

Favyen Bastani
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Label-Efficient and Compute-Efficient Video Analytics

David Bau III
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Dissection of Deep Neural Networks

Aaron S. Baumgarten
(September, 2021)
Thesis in the field of Aerospace Computational Engineering submitted to the Department of Aeronautics and Astronautics: Development of Models for Mixtures of Fluids and Granular Sediments

Cenk Baykal
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Sampling-based Algorithms for Fast and Deployable AI

Ashley Lynne Beckwith
(February, 2022)
Thesis in the field of Mechanical Engineering: Rethinking Plant-Based Materials Production: Selective Growth of Tunable Materials Using Cell Culture Techniques

Marc-André Bégin
Thesis in the field of Aeronautics and Astronautics: Perception and Control Methods for Improving the Autonomy of Off-Road Robots

Jonathan Kyle Behrens
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Performance Implications of Mitigating Transient Execution Side Channel Attacks

Mohammed Benzaouia
(February, 2022)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: On Applications of Resonances, from One to Infinity

Brij M. Bhushan
(February, 2022)
Thesis in the field of Mechanical Engineering: Electrostatically Levitated Object Handoff to Minimize Wear and Particle Generation

Andrew Michael Biedermann
Thesis in the field of Chemical Engineering: An Integrated Approach to Enable Rapid Scalable Upstream Production of Subunit Vaccines with Pichia pastoris (Komagataella phaffii)

Rebecca Mae Black
Thesis in the field of Biological Engineering: Understanding the Differential Effects of Dexamethasone on the Metabolism of Healthy and Diseased Articular Cartilage

William George Boag
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Evidence-Based AI Ethics

Carles Boix
Thesis in the field of Computational and Systems Biology: Gene-Regulatory Circuitry of Disease Risk and Progression

Jacob de Riba Borrajo
(February, 2022)
Thesis in the field of Biological Engineering: New Biological Pathways

Andrew Thomas Bouma
Thesis in the field of Mechanical Engineering: Thermodynamically Driven Advances in Efficient and Cost-Effective Desalination and Brine Treatment

Brenden Andrew Butters
(February, 2022)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Digital and Microwave Superconducting Electronics and Experimental Apparatus

Ki-Jana B. Carter
Thesis in the field of Materials Science and Engineering: Computational Methods for Small-Molecule Transparent Semiconductors

Orhan Tunç Çeliker
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Automated Cellular Identity Assignment in C. elegans Using Differential Gene Expression

Woo Hyun Chae
Thesis in the field of Materials Science and Engineering: Development of Solution-Processed Stable Silver Nanowire Networks for Transparent Electrodes

Tej Chajed
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Verifying a Concurrent File System with Sequential Reasoning

Nisha Chandramoorthy
(September, 2021)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: An Efficient Algorithm for Sensitivity Analysis of Chaotic Systems

Cecile Anne-Carole Frederique Chazot
Thesis in the field of Materials Science and Engineering: Spatially Directed Interfacial Polymerization

Yifeng Che
(February, 2022)
Thesis in the field of Nuclear Science and Engineering: Application of Data-Driven Methods in Nuclear Fuel Performance Analysis

Benson S. Chen
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Molecular Graph Representation and Generation for Drug Discovery

Changchen Chen
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: High-Dimensional Quantum Key Distribution with Frequency Encoding

Sitan Chen
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Provable Algorithms for Resilient Data Science

Siyu Chen
(February, 2022)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Efficient and Equitable Travel Demand Management Using Price and Quantity Controls

Yen-Ting Chi
Thesis in the field of Materials Science and Engineering: External Field Effects on Defects in Functional Oxides: Experiments and Simulations

Rohan Sunil Chitnis
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Learning State and Action Abstractions for Effective and Efficient Planning

Jaclyn Leigh Cho
(September, 2021)
Thesis in the field of Materials Science and Engineering: Design of Superelastic Secondary-Phase-Toughened Alloys

Jae Hyung Cho
Thesis in the field of Mechanical Engineering: Microscopic Characterization of Macroscopic Colloidal Gel Rheology

Chanyeol Choi
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Memristor-Based AI Hardware for Reliable and Reconfigurable Neuromorphic Computing

Hyeongrak Choi
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Strong Light-Matter Interaction with Cavities for Quantum Information

Kyungyong Choi
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Versatile Biological Sample Preparation Platform Using Microfluidic Cell Sorting Device

Nadim Chowdhury
Thesis in the field of Electrical Engineering and Computer Science: GaN Complementary Metal–Oxide–Semiconductor (CMOS) Technology on GaN-on-Si

Ty Christoff-Tempesta
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Design of Ultra-Robust Supramolecular Assemblies and Their Application to Water Remediation

Yu-An Chung
Thesis in the field of Electrical Engineering and Computer Science: Self-Supervised Learning for Speech Processing

Alexandra Churikova
Thesis in the field of Materials Science and Engineering: Spin Hall Magnetoresistance and Current-Induced Magneto-Transport in Insulating Antiferromagnetic Oxides

Pierre Colombe Dromel
(February, 2022)
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: A Biomaterial-Based Stem Cell Therapy for Retinal Regeneration

Rachel Clare Connick
Thesis in the field of Nuclear Science and Engineering: Assessing Differential Scanning Calorimetry as a Retrospective Dosimetry Method for the Verification of Uranium Enrichment Activities

Nathan Stuart Corbin
Thesis in the field of Chemical Engineering: Electrocatalytic Conversion of Carbon Dioxide to Value-Added Chemicals

Sarah Clare Cowles
Thesis in the field of Chemical Engineering: An Affinity Threshold for Maximum Efficacy in Anti-PD-1 Cancer Immunotherapy

Samuel Steven Cruz
Thesis in the field of Mechanical Engineering: Capillary-Driven Condensation for Heat Transfer Enhancement in Steam Power Plants

Siyu Dai
Thesis in the field of Mechanical Engineering: Learning to Make Decisions in Robotic Manipulation

Mina Dalirrooyfard
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Finding Patterns, Short Cycles and Long Shortest Paths in Graphs

Neil Chandra Dalvie
Thesis in the field of Chemical Engineering: Product and Host Engineering for Low-Cost Manufacturing of Therapeutic Proteins in the Yeast Komagataella phaffii

Phillip Howard Daniel
(February, 2022)
Thesis in the field of Mechanical Engineering: Analysis, Design, and Control of Supernumerary Robotic Limbs Coupled to a Human

Paul Dannenberg
(September, 2021)
Thesis in the field of Health Sciences and Technology submitted to the Harvard-MIT Program in Health Sciences and Technology: Scalable Development of Multiplexed Microparticle Technologies for Optical Single-Cell Barcoding

Shoshana Lea Das
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Engineering Three Dimensional In Vitro Approaches to Study Cardiac Injury and Repair

Supratim Das
(See also M.B.A., Course XV)
Thesis in the field of Chemical Engineering: Learning the Electrochemistry of Degradation and Safety in Graphite Porous Electrodes for Lithium-ion Batteries

Christopher Lee Dean
Thesis in the field of Electrical Engineering and Computer Science: Advances in Hierarchical Probabilistic Multimodal Data Fusion

Ismail Degani
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Signal Processing Techniques Applied to Biomedical Diagnostics

Joseph Jeff DelPreto
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Robots as Minions, Sidekicks, and Apprentices: Using Wearable Muscle, Brain, and Motion Sensors for Plug-and-Play Human-Robot Interaction

Paula do Vale Pereira
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Experimental Validation of Melt Probe Models for the Exploration of Ocean Worlds

Connor Dobson
(February, 2022)
Thesis in the field of Biological Engineering: Lentiviral Vector Engineering for High-Throughput Immune Profiling

Zijing Dong
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: MRI Techniques for Quantitative and Microstructure Imaging

Aidan Patrick Dowdle
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Design of a High Specific Power Electric Machine for Turboelectric Propulsion

Jianyi Du
(February, 2022)
Thesis in the field of Mechanical Engineering: Advanced Rheological Characterization of Nanofilled Materials for Automotive Applications

Rebecca R. Du
Thesis in the field of Biological Engineering: Designing 3D Wireframe DNA Nanoparticles for Programmable Innate Immune Activation

Tao Du
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Differentiable Simulation Methods for Robotic Agent Design

Surya Effendy
Thesis in the field of Chemical Engineering: Corrosion and Corrosion Prevention Technology: Revisiting the Fundamentals and Looking Forward

Erik Roger Eisenach
Thesis in the field of Electrical Engineering and Computer Science: Vector Magnetometry Using Cavity-Enhanced Microwave Readout of Solid-State Spin Sensors

Sally Ibrahim El-Henawy
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Statistical Modeling of the Effects of Process Variations on Silicon Photonics

Natalie Suzanne Eyke
Thesis in the field of Chemical Engineering: Automating Reaction Development: Hardware and Software for Fully-Automated High-Fidelity Navigation of High-Dimensional Chemical Reaction Space

Takian Fakhrul
(February, 2022)
Thesis in the field of Materials Science and Engineering: Iron Garnet Thin Films for Integrated Photonics and Spintronics

Cheng Fang
(September, 2021)
Thesis in the field of Aeronautics and Astronautics: Efficient Algorithms and Representations for Chance-Constrained Mixed Constraint Programming

Olumurejiwa A. Fatunde
Thesis in the field of Operations Management & Decision Sciences submitted to the Department of Civil and Environmental Engineering: The Impact of Interpersonal Relationships and Incentive Structures on the Performance of Actors in Informal Supply Chains

Samuel James Faucher
Thesis in the field of Chemical Engineering: Dynamics and Phase Behavior of Fluids inside Isolated Carbon Nanotubes

Sarah C. Fay
(September, 2021)
Thesis in the field of Mechanical Engineering: Optimizing Shoe Midsoles for Running Performance

Álvaro-Miguel Fernández Galiana
(February, 2022)
Thesis in the field of Mechanical Engineering: Development of Precision, Field-Deployable, Opto-Mechanical Instrumentation: Accessibility as a Functional Requirement

Michael Forsuelo
Thesis in the field of Chemical Engineering: Investigations into Message Passing Neural Networks and Polymer Fouling

Kevin James Fox
(See also M.B.A., Course XV)
Thesis in the field of Chemical Engineering Practice submitted to the Department of Chemical Engineering: Carbon Catabolite Repression Relaxation: Approaches for Sugar Co-Utilization in *Escherichia coli*

Thibaud Fritz
(February, 2022)
Thesis in the field of Aeronautics and Astronautics: Plume to Global-Scale Atmospheric Impacts of Aviation Emissions

Luke Benjamin Funk
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Image-Based Pooled Genetic Screens for Complex Cellular Phenotypes

Hayley Jayne Gadol
(September, 2021)
Thesis in the field of Environmental Chemistry submitted to the Department of Civil and Environmental Engineering: Cycling of Iron and Manganese (Oxyhydr) oxides in the Presence of Organic Matter

Amit A. Gandhi
(February, 2022)
Thesis in the field of Mechanical Engineering: Sensor-Based Methods for Characterizing Technology Impact in Low-Resource Settings

Haining Gao
Thesis in the field of Materials Science and Engineering: Tailoring Fluoride/Fluorine Bond Activity for High-Energy Li and Li-ion Batteries

Wei Gao
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Representing Unstructured Environments for Robotic Manipulation: Toward Generalization, Dexterity and Robustness

Caelan R. Garrett
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Sampling-Based Robot Task and Motion Planning in the Real World

Clement Gehring
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Efficient Reinforcement Learning via Singular Value Decomposition, End-to-End Model-Based Methods and Reward Shaping

Jacqueline Sophie Gerritsen
Thesis in the field of Biological Engineering: Mechanistic Characterization of RTK Signaling Networks Using Phosphoproteomic Approaches

Albert Reuben Gnadt
Thesis in the field of Aeronautics and Astronautics: Advanced Aeromagnetic Compensation Models for Airborne Magnetic Anomaly Navigation

Peter T. Godart
(September, 2021)
Thesis in the field of Mechanical Engineering: Mechanisms of Liquid-Metal-Activated Aluminum-Water Reactions and Their Application

Jordan A. Goldstein
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Technologies for Room-Temperature Mid-Infrared Photodetection Using Graphene

Gustavo Nunes Goretkin
(February, 2022)
Thesis in the field of Computer Science and Engineering submitted to the Department of Electrical Engineering and Computer Science: Visibility-Aware Motion Planning

Prateesh Goyal
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Congestion Control in Highly Variable Networks

Elizabeth Erin Grace
(September, 2021)
Thesis in the field of Biological Engineering: Characterization of Anti-Tumor T Cell Specificities to Inform Engineering of Antigen-Targeted Immunotherapies

Katharine Virginia Greco
(September, 2021)
Thesis in the field of Chemical Engineering: On the Impact of Electrode Properties and Their Design for Redox Flow Battery Performance

Daisy Hikari Green
Thesis in the field of Electrical Engineering and Computer Science: Electrical Monitoring of Electromechanical Systems

Chongjie Gu
(September, 2021)
Thesis in the field of Mechanical Engineering: A Deterministic Model for Wear of Piston Ring and Liner and a Machine Learning-Based Model for Engine Oil Emissions

Fengdi Guo
(September, 2021)
Thesis in the field of Civil and Environmental Engineering: Improving Pavement Networks through Performance-Based Planning with Optimal Treatment Strategies and Management Policies

Manuel Gutierrez
(September, 2021)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Stability Methods for Regulated Loads

Seung Kyun Ha
(September, 2021)
Thesis in the field of Chemical Engineering: Engineering the Synthesis and Properties of Two-Dimensional Colloidal Perovskite Nanoplatelets

Cameron George Halliday
(See also M.B.A., Course XV)
Thesis in the field of Chemical Engineering Practice submitted to the Department of Chemical Engineering: Molten Alkali Metal Borates for High Temperature Carbon Capture

Jennifer Lynn Hammelman
(September, 2021)
Thesis in the field of Computational and Systems Biology: Chromatin Accessibility Informs Cell Identity: Studies in Silico, In Vitro and In Vivo

Jiahao Han
(February, 2022)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Harnessing Magnetic Switching and Dynamics Using Electron and Magnon Spin Currents

Yining Hao
Thesis in the field of Chemical Engineering: Applications of Engineered Proteins in Redox Biology and Biomarker Detection Assay Development

Songtao He
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Enriching Digital Maps with Aerial Imagery and GPS Data

Tianxing He
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Towards a Deeper Understanding of Neural Language Generation

Shayna Lynne Hilburg
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Computational Studies of Bio-Inspired Synthetic Random Heteropolymers

Eric Daniel Hinterman
Thesis in the field of Aeronautics and Astronautics: Multi-Objective System Optimization of a Mars Atmospheric ISRU Plant

Charles Arthur Hirst
Thesis in the field of Nuclear Science and Engineering: Quantifying Radiation Damage through Stored Energy Released during Defect Annealing in Metals

Dhiraj Holden
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Modern Interactive Proofs

Dylan Alexander Holmes
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Computing Moral Hypotheticals

Celestine Jia Huey Hong
Thesis in the field of Chemical Engineering: Engineering Materials for Non-Compressible Torso Hemorrhage and Internal Bleeding

Markus Attila Horvath
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: A Multimodal Approach to Investigate the Effects of Respiration on Fontan Flow to Inform Strategies for Circulatory Support

MayLin Tian Howard
(September, 2021)
Thesis in the field of Chemical Engineering: Layer-by-Layer Systems for Craniomaxillofacial Bone Repair

Jonathan Yee-Ting Hsu
(February, 2022)
Thesis in the field of Biological Engineering: Computational and Experimental Methods for CRISPR-based Saturation Mutagenesis Screens

Lucy Hu
(February, 2022)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Soft Robotics Applied to the Development of a Diaphragm Assist System

Hejin Huang
(September, 2021)
Thesis in the field of Computational Materials Science and Engineering submitted to the Department of Materials Science and Engineering: Designing and Fabricating 3D Nanostructures through Directed Self–Assembly of Block Copolymers

Brooke Donna Huisman
Thesis in the field of Biological Engineering: Tool Development for Studying and Manipulating Peptide-MHC Interactions in a Globally-Representative Manner

In Young Hur
(February, 2022)
Thesis in the field of Air-Breathing Propulsion submitted to the Department of Aeronautics and Astronautics: Forced Response System Identification of Full Aero-Engine Rotordynamic Systems

Mohamed Ibrahim Mohamed Ibrahim
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Miniaturized Chip-Scale Quantum and Terahertz Systems Through Tight Integration of Electronics, Electromagnetics, and Qubits

Mirai Ikebuchi
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Applications of Homological Algebra to Equational Theories

Syed Muhammad Imaduddin
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Ultrasound-Based Noninvasive Monitoring Methods for Neurocritical Care

Jeevana Priya Inala
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Neurosymbolic Learning for Robust and Reliable Intelligent Systems

Gregory R. Izatt
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Capturing Distributions over Worlds for Robotics with Spatial Scene Grammars

Vishnu Jayaprakash
(February, 2022)
Thesis in the field of Mechanical Engineering: Engineering Physico-Chemical Interactions Across Drug Delivery, Agriculture and Carbon Capture

Zachary David Jensen
(February, 2022)
Thesis in the field of Materials Science and Engineering: Data Driven Synthesis Planning Applied to Zeolite Materials

Steven Joseph Jepeal
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Intermediate Energy Proton Irradiation: An Experimental and Analytical Foundation for Bulk Radiation Damage Testing

Bo Jiang
(February, 2022)
Thesis in the field of Mechanical Engineering: System Design, Noise Reduction, and Improved Dimension Reconstruction for High Performance Ellipsometry

Menglei Jiang
(February, 2022)
Thesis in the field of Mechanical Engineering: High-Strength Transformation-Induced Plasticity Steels with Reverted Interlath Austenite

Wengong Jin
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Graph Representation Learning for Drug Discovery

Peiyu Jing
(February, 2022)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Design and Evaluation of Urban Congestion Pricing Policies with Microsimulation of Passenger and Freight

Seong Soon Jo
Thesis in the field of Materials Science and Engineering: Processing and Optical Uses of Van der Waals Layered Materials

Hilary Anna Johnson
Thesis in the field of Mechanical Engineering: Adaptive Hydraulics for Improved Centrifugal Pump Efficiency

Matthew Sean Johnson
Thesis in the field of Chemical Engineering: Automatic Generation and Analysis of Chemical Kinetic Mechanisms

Byong Ha Kang
(September, 2021)
Thesis in the field of Biological Engineering: Identification and Knockout of Immunodominant Endogenous Retroviral Antigen in Murine Tumor Models

Iksung Kang
Thesis in the field of Electrical Engineering and Computer Science: Multi-Dimensional Computational Imaging from Diffraction Intensity Using Deep Neural Networks

Pritpal Singh Kanhaiya
Thesis in the field of Electrical Engineering and Computer Science: Carbon Nanotubes for Space Electronics: Enabling New Applications with Emerging Technologies

Bharath Kannan
Thesis in the field of Electrical Engineering and Computer Science: Waveguide Quantum Electrodynamics with Superconducting Qubits

Alexandre Kaspar
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Garment Design Workflows for On-Demand Machine Knitting

Karthik Kavassery Gopalakrishnan
(September, 2021)
Thesis in the field of Aeronautics and Astronautics: Modeling and Control of Networked Systems: Applications to Air Transportation

Muhammad Ibrahim Wasiq Khan
Thesis in the field of Electrical Engineering and Computer Science: New Frontiers in Silicon Terahertz Electronics: Wirelessly Powered THz-ID and Secure THz Links

Dongha Kim
Thesis in the field of Materials Science and Engineering: Understanding and Controlling the Surface Chemistry of Oxides to Enhance Catalytic Activity at Elevated Temperatures

Seunghyeon Kim
(September, 2021)
Thesis in the field of Chemical Engineering: Boosting Biodetection Signals via Photopolymerization: Strategies for Photocatalyst Amplification

Yoonho Kim
Thesis in the field of Mechanical Engineering: Magnetic Soft Continuum Robots for Telerobotic Stroke Intervention

Younggyu Kim
Thesis in the field of Materials Science and Engineering: Understanding and Controlling the Degradation Mechanisms at Cathode-Electrolyte Interfaces in All-Solid-State Lithium-Ion Batteries

Eren Can Kizildağ
Thesis in the field of Electrical Engineering and Computer Science: Algorithms and Algorithmic Barriers in High-Dimensional Statistics and Random Combinatorial Structures

Ishwar N. Kohale
(September, 2021)
Thesis in the field of Biological Engineering: Translational Phosphoproteomics Methods to Identify Biomarkers and Novel Therapeutic Targets

Stephanie Mabel Kong
(September, 2021)
Thesis in the field of Chemical Engineering: Layer-by-Layer Nanoparticles for Targeted Delivery and Treatment of Ovarian Cancer

James Brandon Koppel
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Meta-Metaprogramming

Yosef S. Kornbluth
(September, 2021)
Thesis in the field of Mechanical Engineering: Microplasma-Enabled Sputtering of Nanostructured Materials for the Agile Manufacture of Electronic Components

Artyom Kossolapov
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Experimental Investigation of Subcooled Flow Boiling and CHF at Prototypical Pressures of Light Water Reactors

Konstantin Krismer
(September, 2021)
Thesis in the field of Biological Engineering: Principled Methods and Models for Deep Learning Based Functional Genomics

Joshua Moses Kubiak
(September, 2021)
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Polymer Grafted Nanoparticles as Functional and Mechanically Robust Single-Component Composites

Yen-Ling Kuo
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Compositional Robot Learning for Generalizable Interactions

Alim Ladha
(February, 2022)
Thesis in the field of Biological Engineering: Characterization and Engineering of Transposons for Genome Editing

Hsin-Yu Lai
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Tracking of Eye Movement Features for Individualized Assessment of Neurocognitive State Using Mobile Devices

Madeleine Reynolds Laitz
Thesis in the field of Electrical Engineering and Computer Science: Light-Matter Interactions in High-Efficiency Photovoltaics, LEDs, and Strongly-Coupled Microcavities

Christopher I. Lang
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Applications of Probabilistic Machine Learning Models to Semiconductor Fabrication

Christian Lee Lau
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: A Manufacturing Methodology for Carbon Nanotube-based Digital Systems: from Devices, to Doping, to System Demonstrations

Dongchan Lee
Thesis in the field of Mechanical Engineering: Robustness Verification and Optimization of Nonlinear Systems

Ethan Sukrae Lee
Thesis in the field of Electrical Engineering and Computer Science: Gate-Geometry Dependence of Enhancement-Mode p-GaN Gate High Electron Mobility Transistors

Jongwoo Lee
(September, 2021)
Thesis in the field of Mechanical Engineering: Effects of Mechanical Interventions on Human Locomotion

Margaret Sandra Lee
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Nanoparticle Self-Assembly for the Synthesis and Processing of Ordered Nanocomposite Solids

Meelim Jasmine Lee
Thesis in the field of Biological Engineering: Integrated Computational and Experimental Analysis of Non-Neuronal Cell Molecular Mechanisms Contributing to Alzheimer's Disease Progression

Sangho Lee
(February, 2022)
Thesis in the field of Mechanical Engineering: Nanoscale Engineering for Mixed-Dimensional Heterostructure Growth and Integration

Szu-Yu Lee
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Imaging through Optical Multimode Fiber: Towards Ultra-Thin Endoscopy

Youngbin Lee
Thesis in the field of Materials Science and Engineering: Engineering Biomedical and Bioinspired Fiber Devices via Thermal Drawing

Eric Christian Lehnhardt
(September, 2021)
Thesis in the field of Biological Engineering: Engineering Biological Materials for Carbon Capture and the Electrochemical Reduction of Carbon Dioxide to Light Hydrocarbons

Arny Leroy
(September, 2021)
Thesis in the field of Mechanical Engineering: Subambient Passive Cooling Enabled by Polyethylene Aerogels

Maxwell A. L'Etoile
Thesis in the field of Materials Science and Engineering: Effects of Crystalline Anisotropy on Solid-state Dewetting

Graham Leverick
(February, 2022)
Thesis in the field of Mechanical Engineering: Towards Comprehensive Design of Electrolytes for Electrochemical Energy Storage

Jonathan Li
(February, 2022)
Thesis in the field of Computational and Systems Biology: Systems Biology Approaches for Elucidating Early ALS Disease Processes

Matthew Tin Chun Li
(September, 2021)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Applications of Deep Learning to Scientific Inverse Problems

Max Zhaoyu Li
(September, 2021)
Thesis in the field of Aeronautics and Astronautics: Spectral Models for Air Transportation Networks

Xinhao Li
(September, 2021)
Thesis in the field of Mechanical Engineering: Disordered Optics for Multidimensional Information Processing

Yiliang Li
Thesis in the field of Materials Science and Engineering: Ionic Conductivity Transitions in Antiperovskite Ionic Conductors

Ruizhi Liao
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Multimodal Representation Learning for Medical Image Analysis

Lucas Matthias Karl Liebenwein
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Efficient Deep Learning: From Theory to Practice

Jasper Z. Lienhard
Thesis in the field of Materials Science and Engineering: High-Velocity Impact of Metal Microparticles

Aditya Madan Limaye
Thesis in the field of Chemical Engineering: Physical Models and Statistical Methods for Understanding Electrochemical Kinetics

Sharon Lin
(September, 2021)
Thesis in the field of Chemical Engineering: Free Volume Manipulation Techniques of Polymer Membranes for Gas Separations

Ting-An Lin
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Strategies for High-Performance Solid-State Photon Upconversion

Katherine Y. Liu
(February, 2022)
Thesis in the field of Aeronautics and Astronautics: Improving Autonomous Navigation and Estimation in Novel Environments

Quanquan C. Liu
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Scalable and Efficient Graph Algorithms and Analysis Techniques for Modern Machines

Xinyue Liu
(February, 2022)
Thesis in the field of Mechanical Engineering: Hydrogel Machines - Design, Manufacturing, and Applications

Zhenyu Liu
(See also S.M., Course XVI)
Thesis in the field of Networks and Statistics submitted to the Department of Aeronautics and Astronautics: Decentralized Inference and its Application to Network Localization and Navigation

Julie Victoria Logan
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Uncovering the Fundamental Driver of Semiconductor Radiation Tolerance

Hyun-Chae Loh
(September, 2021)
Thesis in the field of Civil and Environmental Engineering: Time-Space-Resolved Raman Analysis of Structure-Property Relationships in Heterogeneous Structural Materials

Josué Jacob López
Thesis in the field of Electrical Engineering and Computer Science: On-Chip Planar Lens Architectures for Optical Beam Steering

Charlotte Emily Lowey
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Uncertainty-Based Design Optimization and Decision Options for Responsive Maneuvering of Reconfigurable Satellite Constellations

Hongyin Luo
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Self-Training for Natural Language Processing

Jiaming Luo
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Automatic Methods for Sound Change Discovery

Vamsi Viswanath Mangena
(February, 2022)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Human Brain Organoids for Studying Malignant Cell States and Intercellular Communications in Human Glioma

Lorenzo Masoero
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Prediction and Design in Experiments: a Bayesian Nonparametric Approach

Abhilash Mathews
Thesis in the field of Applied Plasma Physics submitted to the Department of Nuclear Science and Engineering: Physics-Informed Machine Learning Techniques for Edge Plasma Turbulence Modelling in Computational Theory and Experiment

Samuel Westcott McAlpine
(February, 2022)
Thesis in the field of Nuclear Science and Engineering: Materials Design for Nuclear Energy Systems: High Entropy Alloys and Metallic Multi-Layer Composites

William Connor McCarthy
Thesis in the field of Nuclear Science and Engineering: The Low Frequency Edge Oscillation in Alcator C-Mod and ASDEX Upgrade I-Mode

Matthew Brian Andrew McDermott
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Leveraging Structure and Knowledge in Clinical and Biomedical Representation Learning

Anthony Drew McDougal
Thesis in the field of Mechanical Engineering: In Vivo Imaging and Morphogenesis of Butterfly Scale Development

Jie Mei
(September, 2021)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: An Optimal Scheduling Method for Multi-Energy System

Nicolas Meirhaeghe
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Neural Encoding of Prior Experience in Sensorimotor Behavior

Rahul Prasanna Misra
(September, 2021)
Thesis in the field of Chemical Engineering: Multiscale Modeling of Electronic Polarization Effects in Interfacial Thermodynamics and Nanoscale Transport Phenomena

Katherine Mizrahi Rodriguez
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Mixed-gas Transport in Microporous Polymer Derivatives for Energy-Efficient Gas Separations

Sajjad Mohammadi Yangijeh
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Modeling, Design, Identification, Drive, and Control of a Rotary Actuator with Magnetic Restoration

Somesh Mohapatra
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Designing Macromolecules using Machine Learning and Simulations

Noor Momin
(September, 2021)
Thesis in the field of Biological Engineering: Engineering, Modeling, and Trialing Intratumoral Immunotherapies for the Treatment of Cancer

Nathan McKay Monroe
(February, 2022)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: High Angular Resolution Beam Steering Terahertz Antenna Arrays for Imaging Applications

Sun Jin Moon
Thesis in the field of Chemical Engineering: Toward Quantitative Understanding of Compartmentalized NADPH Metabolism in Cancer Cells

Matthew Tyler Moraguez
(September, 2021)
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Modeling and Optimization of In-Space Manufacturing to Inform Technology Development

Caris Mariah Moses
Thesis in the field of Electrical Engineering and Computer Science: Optimistic Active Learning of Task and Action Models for Robotic Manipulation

Joshua Alexandre Moss
(February, 2022)
Thesis in the field of Environmental Chemistry submitted to the Department of Civil and Environmental Engineering: Laboratory and Mechanistic Studies of Volatile Organic Carbon Oxidation Systems in the Atmosphere

Eric Michael Hanson Moult
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Optical Coherence Tomography Angiography for Imaging and Analysis of the Choriocapillaris in Late Age-Related Macular Degeneration

Vaikkunth Mugunthan
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: A Practical Approach to Federated Learning

Carlos Muñoz Royo
(September, 2021)
Thesis in the field of Mechanical and Oceanographic Engineering submitted to the Department of Mechanical Engineering: Sediment Plumes and Financial Modeling in the Context of Deep-Sea Polymetallic Nodule Mining

Richard Joshua Murdock
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Modular Magnetic Relaxation Nanomaterial Biosensor Platform for Local, Integrative Chemical Monitoring

Dheeraj Mysore Nagaraj
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Expressivity and Structure in Networks: Ising Models, Random Graphs, and Neural Networks

Anirudh Manoj Kumar Nambiar
Thesis in the field of Chemical Engineering: Automated Execution and Optimization of Flow Chemistry on a Robotic Platform with Integrated Analytics

Jaya Narain
(September, 2021)
Thesis in the field of Mechanical Engineering: Interfaces and Models for Improved Understanding of Real-World Communicative and Affective Nonverbal Vocalizations by Minimally Speaking Individuals

Akshay Krishna Narayan
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Enabling Configurable, Extensible, and Modular Network Stacks

Thaneer Malai Narayanan
(September, 2021)
Thesis in the field of Mechanical Engineering: Prototype Development and Techno-Economic Analysis of Electrochemical Energy Storage Systems

Vikram Nathan
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Instance Optimized Database Indexing

Quan Minh Nguyen
Thesis in the field of Electrical Engineering and Computer Science: Accelerating Irregular Applications with Pipeline Parallelism

Cynthia Ni
Thesis in the field of Chemical Engineering: Multiplexed Transcriptional Control Strategies for Biosynthesis Using Mixed Substrates in *Escherichia coli*

Caroline Jo Nielsen
Thesis in the field of Chemical Engineering: Nonsmooth Methods for Process Integration

Catherine Anna Nikiel
(February, 2022)
Thesis in the field of Hydrology and Climate submitted to the Department of Civil and Environmental Engineering: On the Climate-Agriculture-Water Nexus at the Regional Scale

Anastasia Nikolakopoulou
(February, 2022)
Thesis in the field of Chemical Engineering: Automated Optimization and Control of Modular Chemical Systems

Sarah Kate Nyquist
Thesis in the field of Computational and Systems Biology: Differential Analysis of scRNA-Seq Data to Characterize Epithelial Cells in Health and Disease

Christian Edward Oliver
Thesis in the field of Materials Science and Engineering: Understanding and Optimizing Nanophase Separation Sintering

Oguzhan Murat Onen
Thesis in the field of Electrical Engineering and Computer Science: Devices and Algorithms for Analog Deep Learning

Daniel Oropeza Gomez
(September, 2021)
Thesis in the field of Mechanical Engineering: Testbeds for Advancement of Powder Bed Additive Manufacturing with Application to Reactive Binder Jetting of Ceramics

Matthew Ryan Overlin
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Methods for Parameter Estimation with Devices in Microgrids

Berk Öztürk
(February, 2022)
Thesis in the field of Aeronautics and Astronautics: Global and Robust Optimization for Engineering Design

Jonathan Edward Page
Thesis in the field of Design Engineering submitted to the Department of Mechanical Engineering: A Model for Set-Based Design at the System-of-Systems Scale with Approaches for Emergent Properties

Menghsuan Sam Pan
(February, 2022)
Thesis in the field of Materials Science and Engineering: Aqueous Polysulfide Electrodes for Low-Cost Grid-Scale Energy Storage

Shalmalee Dhananjay Pandit
(February, 2022)
Thesis in the field of Biological Engineering: Towards Artificial Photosynthesis: Yeast-Inorganic Hybrid System

Christopher Louis Panuski
Thesis in the field of Electrical Engineering and Computer Science: Resonant Spatial Light Modulation: Optical Programming and Sensing at the Fundamental Limit

Clara Park
Thesis in the field of Mechanical Engineering: Development of a High-Fidelity Biorobotic Cardiovascular in vitro Simulator

Jimin Park
(February, 2022)
Thesis in the field of Materials Science and Engineering: Electrochemical and Magnetochemical Approaches for Neuronal Modulation

Minkyung Park
(February, 2022)
Thesis in the field of Chemical Engineering: Property-Structure Relationships and Design Rules for Carbon Nanotube Based Corona Phase Molecular Recognition for Biomolecules

Molly Frances Parsons
Thesis in the field of Biological Engineering: Methods to Program and to Probe RNA Tertiary Structure with Nucleic Acid Origami

Jiayu Peng
Thesis in the field of Materials Science and Engineering: Activity and Stability Design Principles of Transition Metal Compounds for Decarbonization

Pai Peng
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: NMR Studies of Quantum Thermalization

Clément Pit-Claudel
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Relational Compilation: Functional-to-Imperative Code Generation for Performance-Critical Applications

Bauyrzhan K. Primkulov
Thesis in the field of Civil and Environmental Engineering: Interfacial Fluid Dynamics in Porous Media

Victor Prost
(September, 2021)
Thesis in the field of Mechanical Engineering: Development and Validation of a Prosthetic Foot Design Framework Based on Lower Leg Dynamics

Kuan Qiao
Thesis in the field of Mechanical Engineering: Gallium Nitride Remote Epitaxy

Hanzhang Qin
Thesis in the field of Civil Engineering and Computation submitted to the Department of Civil and Environmental Engineering: Stochastic Control through a Modern Lens: Applications in Supply Chain Analytics and Logistical Systems

Divya Ramamoorthy
Thesis in the field of Biological Engineering: Developing Machine Learning Algorithms for Characterizing Disease Progression in Amyotrophic Lateral Sclerosis

Paul Louis Reginato
(February, 2022)
Thesis in the field of Biological Engineering: *In situ* Genome Sequencing

Miguel Arnold Silverio Reyes
(September, 2021)
Thesis in the field of Biological Engineering: Profiling, Prototyping, and Perturbing Human Immune Responses

Luke Hyunsik Rhym
(February, 2022)
(See also S.M., Course X-A)
Thesis in the field of Chemical Engineering: Development and Applications of Peptide Barcoded Nanoparticles for High-throughput Screening of mRNA Delivery Materials in vivo

Sean Gunn Robertson
Thesis in the field of Nuclear Science and Engineering: Evaluating Fluoride Molten Salt Thermophysical Properties with Transient Grating Spectroscopy

Kara Rodby
Thesis in the field of Chemical Engineering: Bringing Redox Flow Batteries to the Grid: Techno-economic Modeling for Chemistry-Informed Design of Redox Flow Batteries

Andrew Rohskopf
Thesis in the field of Mechanical Engineering: Computational Methods for Studying Phonon Dynamics

Charles Roques-Carmes
Thesis in the field of Electrical Engineering and Computer Science: Shaping Light-Matter Interactions for Free-Electron Radiation and Photonic Computing

Jonathan Shmuel Rosenfeld
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Scaling Laws for Deep Learning

Candace Cheronda Ross
Thesis in the field of Electrical Engineering and Computer Science: Learning Language with Multimodal Models

Erin Byrne Rousseau
(February, 2022)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Tools for Monitoring and Modulating Cellular Communication

Lucas Thorley Rush
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Integrative Approach to Metal Extraction and Electrification

Kevin M. Sabo
Thesis in the field of Aeronautics and Astronautics: Application of Ab-Initio Quantum Chemistry Techniques to Hypersonic Flows for Plasma Blackout Alleviation

Reyu Sakakibara
(September, 2021)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: A Practical, High Performance Metallodielectric 2D Photonic Crystal Emitter for Thermophotovoltaics

Erica Elizabeth Salazar
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Quench Dynamics and Fiber Optic Quench Detection of VIPER High Temperature Superconductor Cable

Shibani Vinay Santurkar
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Machine Learning Beyond Accuracy: A Features Perspective on Model Generalization

Inés Sanz Morère
(February, 2022)
Thesis in the field of Aerospace, Energy, and the Environment submitted to the Department of Aeronautics and Astronautics: Constraining Climate Impact Uncertainties from Future Aviation

Morteza Sarmadi
(February, 2022)
Thesis in the field of Mechanical Engineering: Microscale Polymeric-Based Technologies for Controlled Vaccine Delivery

Andrea Scarinci
(February, 2022)
Thesis in the field of Aerospace Computational Engineering submitted to the Department of Aeronautics and Astronautics: Robust Bayesian Inference via Optimal Transport Misfit Measures: Applications and Algorithms

Daniel Ervin Schemmel
Thesis in the field of Electrical Engineering and Computer Science: Design of High-Power High-Frequency Coreless Transformer Systems

Kaylee Christine Schickel
Thesis in the field of Chemical Engineering: Design and Analysis of Methods to Eliminate Oscillatory Behavior in Bioreactors for Continuous Viral Vaccine Manufacturing

Zachary J. Schiffer
(September, 2021)
Thesis in the field of Chemical Engineering: Kinetic and Thermodynamic Aspects of Voltage as a Driving Force for Ammonia Activation

Tal Schuster
(September, 2021)
Thesis in the field of Computer Science and Engineering submitted to the Department of Electrical Engineering and Computer Science: Robust and Efficient Deep Learning for Misinformation Prevention

Daniel Schwalbe Koda
Thesis in the field of Materials Science and Engineering: First-Principles Control of Zeolite Synthesis, Transformations, and Intergrowth

Nicholas Stearns Selby
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Learned Lifting Linearizations

Jee Hyun Seong
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Investigation of Separate Effects of Surface Condition on Subcooled Flow Boiling Heat Transfer

Arunkumar Seshadri
(February, 2022)
Thesis in the field of Nuclear Science and Engineering: Understanding the Impact of Nuclear Environment on the Hydrothermal Corrosion in SiC

Ankit Jayesh Shah
(September, 2021)
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: Interactive Robot Training for Complex Tasks

Darsh Jaidip Shah
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Contrastive Text Generation

Sahil Rajesh Shah
(September, 2021)
Thesis in the field of Mechanical Engineering: Making Decentralized Desalination More Affordable Using Improved Process Design, Control, and Energy Recovery

Ariya Reza Shajii
(September, 2021)
Thesis in the field of Computer Science and Engineering submitted to the Department of Electrical Engineering and Computer Science: High-Performance Computational Genomics

Macheng Shen
Thesis in the field of Mechanical Engineering: Robust and Scalable Multiagent Reinforcement Learning in Adversarial Scenarios

Tianxiao Shen
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Controlling Neural Language Generation

Alvin Shi
(September, 2021)
Thesis in the field of Computational and Systems Biology: Computational Dissection and Prediction of Cancer Immunotherapy Response

Yoon Ah Shin
Thesis in the field of Materials Science and Engineering: Templated Solid-State Dewetting of Single Crystal Ni Thin Films

Kevin Stanton Silmore
(September, 2021)
Thesis in the field of Chemical Engineering and Computation: From Spheres to Sheets: Colloidal Hydrodynamics, Thermodynamics, and Statistical Inference

Diviya Sinha
(September, 2021)
Thesis in the field of Chemical Engineering: Low Frequency Sonophoresis Assisted Cancer Immunotherapy

Dmitriy Smirnov
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Deep Learning on Geometry Representations

Micah Jacob Smith
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Collaborative, Open-Source, and Automated Data Science

Amit Solomon
(September, 2021)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Noise-Centric Decoding

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Thesis in the field of Materials Science and Engineering: Hydrogen in Aluminum Oxide and at the Aluminum Oxide/Aluminum Interface: an ab initio Thermodynamics and Monte Carlo Investigation

Andrew Hyungsuk Song
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Thesis in the field of Electrical Engineering and Computer Science: Generative Models for Structured Neural Time Series

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Thesis in the field of Mechanical Engineering: Mechanistic Understanding and Enhancing Pool Boiling Heat Transfer via Surface Property and Structure Design

Igor Spasojevic
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: Algorithmic Aspects of Perception-Aware Motion Planning on Resource-Constrained Platforms

Michael Alan Specter
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Thesis in the field of Electrical Engineering and Computer Science: Security Research for the Public Good: A Principled Approach

Andrew Everett Spielberg
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Co-Optimization and Co-Learning Methods for Automated Design of Rigid and Soft Robots

Melany Christine Sponseller
Thesis in the field of Electrical Engineering and Computer Science: The Stability of PbS Quantum Dot Solar Cells

Tathagata Srimani
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Thesis in the field of Electrical Engineering and Computer Science: Nanosystems: From the Lab to the Fab

Sydney Glass Sroka
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Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Sea Spray-Mediated Fluxes at Extreme Wind Speeds

William Thomas Stephenson
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Thesis in the field of Electrical Engineering and Computer Science: Faster and Easier: Cross-Validation and Model Robustness Checks

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Thesis in the field of Mechanical Engineering: High Throughput Extrusion Additive Manufacturing - Rate Limits and System Design

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Thesis in the field of Nuclear Science and Engineering: Capital Cost Evaluation of Advanced Reactor Designs under Uncertainty

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Thesis in the field of Chemical Engineering: Catalytic Upgrading of Lignin From Biomass

Mary Claire Strawser
Thesis in the field of Mechanical Engineering: Density-Shift Immunomagnetic Separation for Pathogen Retrieval from Complex Media

Sandya Subramanian
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Measuring Nociception Under Anesthesia

Kriti Sarasa Subramanyam
(September, 2021)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Chemotherapy-Eluting Intraperitoneal Implants for Advanced Stage Ovarian Cancer Treatment

Won Kyu Calvin Sun
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Thesis in the field of Quantum Science and Engineering submitted to the Department of Nuclear Science and Engineering: Developing Small-Scale Quantum Information Processors Based on Electronic Spins in Diamond

Youngkyu Sung
Thesis in the field of Electrical Engineering and Computer Science: High-Fidelity Two-Qubit Gates and Noise Spectroscopy with Superconducting Qubits

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Thesis in the field of Mechanical Engineering: Learning and Investigating Phenomenological Models for Active Matter

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Thesis in the field of Electrical Engineering and Computer Science: Scalable Perovskite Thin-Film Photovoltaics

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Thesis in the field of Aeronautics and Astronautics: Algorithms for Generation and Tracking of Fast and Agile Flight Trajectories

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Thesis in the field of Civil and Environmental Engineering: Exploration and Exploitation Techniques for High-Dimensional Simulation-Based Optimization Problems in Urban Transportation

Cecilia Andrea Testart Pacheco
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Towards Data-Driven Internet Routing Security

Cristina Coralys Torres Cabán
Thesis in the field of Biological Engineering: Technology Development for the Functional and Structural Analysis of the Brain

Brian Traynor
(September, 2021)
Thesis in the field of Materials Science and Engineering: Reactivity of Crystalline Slag Phases in Cementitious Systems

Brian Trippe
Thesis in the field of Computational and Systems Biology: Bayesian Linear Modeling in High Dimensions: Advances in Hierarchical Modeling, Inference, and Evaluation

Alejandro Elio Trujillo
(September, 2021)
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: A Model-based Methodology for Strategic Reuse of Legacy Designs in Space Mission Architecting

Dimitrios Tsipras
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Robust Machine Learning: The Worst Case and Beyond

Yoichiro Tsurimaki
(September, 2021)
Thesis in the field of Mechanical Engineering: Control of Radiative Heat and Momentum Transfer by Nanophotonic Engineering

Marco Turchetti
Thesis in the field of Electrical Engineering and Computer Science: Nano Vacuum Channel Devices for Electronics and Ultrafast Nanophotonics

Ezinne Egondu Uzo-Okoro
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Robots Making Satellites: Advancing In-Space Manufacturing Using On-Orbit Robotic Assembly

Nuri Denizcan Vanli
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Large-Scale Optimization Methods: Theory and Applications

Claudia Elena Varela
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Device-Enabled Biomechanical Modulation of the Infarcted Heart

Georgios Varnavides
Thesis in the field of Materials Science and Engineering: Electron Hydrodynamics in Crystalline Solids: Microscopic Origins, Mesoscopic Size Effects, and Macroscopic Observables

Rafael Villamor Lora
Thesis in the field of Geotechnical and Geoenvironmental Engineering submitted to the Department of Civil and Environmental Engineering: Experimental Investigations on Flow and Mass Transport in Stressed Rough Fractures

Malik Mamoon AbdelHalim Wagih
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: The Spectral Model of Grain Boundary Solute Segregation

Chi Wang
Thesis in the field of Nuclear Science and Engineering: Experimental Investigation of Critical Heat Flux Enhancement on Engineered Surfaces with Infrared Thermometry

Jiayue Wang
(February, 2022)
Thesis in the field of Nuclear Science and Engineering: Engineering Functional Defects for Materials Design in Clean Energy Storage and Conversion Using External Stimuli

Sheryl Wang
(February, 2022)
Thesis in the field of Bioengineering submitted to the Department of Biological Engineering: Engineering Nanolayered Films for Tunable DNA Delivery

Yi J. Wang
(February, 2022)
Thesis in the field of Mechanical Engineering: Formation Process of Acoustophoretic Patterns

Yue Wang
Thesis in the field of Electrical Engineering and Computer Science: Learning 3D Representations from Data

Wei Wei
(February, 2022)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Strategic Infrastructure Planning to Enable Personal Vehicle Electrification

Nicole Spence Wein
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Algorithms and Hardness for Approximating the Diameter of a Graph

Wei-Hung Weng
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Learning Representations for Limited and Heterogeneous Medical Data

Caroline Andrea Werlang
(February, 2022)
Thesis in the field of Biological Engineering: The Regulation of Bacterial Virulence by Mucin Glycans

Robert Patrick White
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Regulatory Frameworks and Evaluation Methodologies for the Licensing of Commercial Fusion Reactors

Kindle Shea Williams
Thesis in the field of Chemical Engineering: Overcoming Challenges of Fundamental Electrochemical Kinetic Studies under Dilute-Reagent Conditions

Lawrence Man Kit Wong
(September, 2021)
Thesis in the field of Aeronautics and Astronautics: Enabling Effective Safety Learning in Healthcare: Implementing CAST and Designing the STAMP-Based Reporting System

Yifei Xie
(February, 2022)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Real-Time Personalized Tolling with Long-Term Objectives

Helen Jiang Xu
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Optimizing Data Movement in Parallel Applications

Lin Xu
(September, 2021)
Thesis in the field of Materials Science and Engineering: Thin Film Energy Devices

Adam Yala
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Machine Learning Methods for Image-based Personalized Cancer Screening

Simon Huang Ye
(February, 2022)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Metagenomic Sequencing for Viral Diagnostics and Discovery

Heun Mo Yoo
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Time, Momentum, Spin, and Energy Resolved Tunneling Spectrum of a Two-Dimensional Electron System

Tadayuki Yoshitake
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Nonlinear Microscopy System and Protocol for Rapid Evaluation of Freshly Excised Human Tissue

Zhe Yuan
(September, 2021)
Thesis in the field of Chemical Engineering: Gas Separation Using Nanoporous Single-Layer Graphene Membranes

Chulhee Yun
(September, 2021)
Thesis in the field of Electrical Engineering and Computer Science: Optimization for Deep Learning: Bridging the Theory-Practice Gap

Benjamin Jiahong Zhang
(February, 2022)
Thesis in the field of Computational Science and Engineering: Efficient Sampling Methods of, by, and for Stochastic Dynamical Systems

Jingzhao Zhang
(February, 2022)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Some Progress in Experiment-Driven Optimization Theory for Machine Learning

Limiao Zhang
(February, 2022)
Thesis in the field of Nuclear Science and Engineering: A New Triggering Mechanism of the Boiling Crisis Based on the Percolation Theory and Its Implication

Xiuming Zhang
(September, 2021)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Shape, Reflectance, and Illumination From Appearance

Hongbo Zhao
(September, 2021)
Thesis in the field of Chemical Engineering: Data-Driven Modeling of Lithium Intercalation Materials

Mingmin Zhao
(February, 2022)
Thesis in the field of Electrical Engineering and Computer Science: Wireless Sensing with Machine Learning: Through-Wall Vision and Contactless Health Monitoring

Ellen D. Zhong
Thesis in the field of Computational and Systems Biology: Machine Learning for Reconstructing Dynamic Protein Structures from Cryo-EM Images

Weiyue Zhou
(September, 2021)
Thesis in the field of Nuclear Science and Engineering: Influence of Environmental Conditions and Proton Irradiation on Molten Salt Corrosion of Metals

Yu Ren Zhou
Thesis in the field of Materials Science and Engineering: Transport and Damage in Hydrated Coatings — A Model Soft Active Composite Material

Leonardo Zaborowski Zornberg
(February, 2022)
Thesis in the field of Materials Science and Engineering: Optical Interactions in Self-Assembling Systems

Heng Elizabeth Zuo
(September, 2021)
Thesis in the field of Aeronautics and Astronautics: Ultrafast Laser Micromachining for Correction of Thin Optics for Next Generation Space X-Ray Telescopes

Augustine T. Zvinavashe
(February, 2022)
Thesis in the field of Civil and Environmental Engineering: A Bioinspired Approach to Engineer the Seed Microenvironment

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES, DOCTORAL

Doctor of Philosophy

School of Humanities, Arts, and Social Sciences

Rafael Meghani Abramovitz
(September, 2021)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Topics in the Grammar of Koryak

Marc Frederick Aidinoff
(February, 2022)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: A More Updated Union: A History of New Liberals and Their New Computers in the New New South

Emma Marija Atherton
(September, 2021)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Let's Talk About Sex: Sexual Ethics, Agency, and Justice Beyond Consent

Sean Anthony Atkins
Thesis in the field of Political Science: Essays on National Defense in Cyberspace

Neil Banerjee
(September, 2021)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: On the Interaction of Portmanteaux and Ellipsis

Itai Bassi
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Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Fake Features and Valuation from Context

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Thesis in the field of Economics: Essays on Worker Productivity and Labor Supply

Hector Blanco Fernandez
Thesis in the field of Economics: The Economic Effects of Public Housing Programs

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Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Values and Science: An Interdisciplinary Feminist Exploration

Ari Bronsoler Nurko
Thesis in the field of Economics: Essays on Healthcare Delivery Innovation: The Role of Information and Communication Technology

Matthew Franklin Cancian
Thesis in the field of Political Science: Three Essays on Combatant Psychology Among the Peshmerga of Kurdistan

Luísa Reis Castro
(September, 2021)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Vectors of Health: Epidemics, Ecologies, and the Reinvention of Mosquito Science in Brazil

Keny Chatain
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Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Cumulativity from Homogeneity

Daniel G. Clark
Thesis in the field of Economics: Communication, Information, and Learning

Max Isaac Cytrynbaum
Thesis in the field of Economics and Statistics: Essays on Experimental Design

Aileen Marie Devlin
Thesis in the field of Economics: Essays in Health Economics

Richard Alexander Fadok
(February, 2022)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: In Life's Likeness: Biomimicry and the Imitation of Nature

Suzana Fong
(September, 2021)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Nominal Licensing: The Syntactic Distribution and Number Interpretation of Bare Nominals in Wolof

Feixue Gong
Thesis in the field of Economics: Essays in MacroFinance

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Thesis in the field of Economics: Essays in Education Finance

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Thesis in the field of Political Science: Three Essays on Natural Language Processing and Information Extraction with Applications to Political Violence and International Security

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Thesis in the field of Economics and Statistics: Essays in Econometrics

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Thesis in the field of Economics and Statistics: Methods to Improve Fairness and Accuracy in Machine Learning, with Applications to Financial Algorithms

Jia Hui Lee
(September, 2021)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Interstitial Intelligence: Human-Rodent Sensing, Cognition, and Work in Morogoro, Tanzania

Antoine Boris Levy
Thesis in the field of Economics: Essays in Spatial Economics

Shiyao Liu
(September, 2021)
Thesis in the field of Political Science: Causal Inference with Measurement Errors: with Applications to Experimental and Observational Studies

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Thesis in the field of Economics: Essays in Innovation, Automation, and Growth

Jacob Moscona
(September, 2021)
Thesis in the field of Economics: Technological Change and Agricultural Development

Elise S.B. Newman
(September, 2021)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: The (In) Distinction between Wh-Movement and C-Selection

Rodrigo Ochigame
(September, 2021)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Remodeling Rationality: An Inquiry into Unorthodox Modes of Logic and Computation

Zeyu Peng
Thesis in the field of Political Science: Labor Reform and Nativist Revolt: The Causes and Implications of Party Position Change on Immigration

Sara Cristina Plana
(September, 2021)
Thesis in the field of Political Science: The Proxy Paradox: Explaining (Lack of) Control over State-Sponsored Proxy Armed Groups

Dmitry Konstantinovich Privoznov
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Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: A Theory of Two Strong Islands

Anni Aliisa Räty
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Inside The Moral Nexus: On Wrongs, Rights, and Normative Powers

Matthew White Ridley
Thesis in the field of Economics: Essays on the Economics of Mental Illness and Belief Formation

Erik Andrew Hustad Sand
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Sean Yixiang Wang
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Thesis in the field of Economics: Essays on Labor Market Institutions

SLOAN SCHOOL OF MANAGEMENT, DOCTORAL

Doctor of Philosophy

Sloan School of Management

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Thesis in the field of Operations Research: Sparsity in Machine Learning: Theory and Applications

Michael Lingzhi Li
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Thesis in the field of Operations Research: Scalable Algorithms for Optimization and its Applications

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Thesis in the field of Operations Research: Multi-Objective Optimization for Public Policy

Ivan Spassimirov Paskov
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Doctor of Philosophy

School of Science

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Thesis in the field of Physics: Chaos and Thermalization in Quantum Many-Body Systems and Gravity

Sahana Vasudevan
Thesis in the field of Mathematics: Large Genus Bounds for the Distribution of Triangulated Surfaces in Moduli Space

Zachary Vendeiro
(September, 2021)
Thesis in the field of Physics: Raman Cooling and Rydberg Cavity QED

Qingyang Wang
(February, 2022)
Thesis in the field of Physics: Phase Transitions in Dipole-Dipole Interacting Atomic Systems

Ruoxi Wendy Wang
(February, 2022)
Thesis in the field of Biology: A Mechanistic Evaluation of the Role of Aneuploidy During Oncogenesis

Wencong Wang
Thesis in the field of Chemistry submitted to the Department of Chemistry: Efficient Synthetic Strategies for Discrete Macromolecules: Enabling Exploration of Structure-Property Relationships in Biological and Materials Applications

Yimin Wang
(February, 2022)
Thesis in the field of Physics, Statistics, and Data Science submitted to the Department of Physics: New Techniques in Low-Q2 Elastic Electron-Proton Scattering Measurements and the Proton Radius Extraction

Araminta Amabel Wilson
Thesis in the field of Mathematics: Genera via Deformation Theory and Supersymmetric Mechanics

Molly Madeline Wilson
Thesis in the field of Biology: Transcriptional Regulators in Stem Cell Biology

Zhenjie Yan
(February, 2022)
Thesis in the field of Physics: Quasi-particle Breakdown and Heat Transport in a Homogeneous Strongly-Interacting Fermi Gas

Jeehyun Yang
(February, 2022)
Thesis in the field of Physical Chemistry submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Experiment and Modeling Combined Kinetic Study of Bottom-up Polycyclic Aromatic Hydrocarbon Formations

Luming Yang
(September, 2021)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Investigation of Triphenylene-Based Radical-Containing Ligand Bridges in Mediating Electronic Spin Coupling and Sensing Chemical Analytes

Ruoxuan Yang
Thesis in the field of Mathematics: Stable and Unstable Shock Formation of the Burgers-Hilbert Equation

Lauren Elizabeth Yates
(February, 2022)
Thesis in the field of Physics: Using the MicroBooNE Liquid Argon Detector to Search for Electron Neutrino Interactions and Understand the MiniBooNE Anomaly

Mengshan Ye
Thesis in the field of Chemistry submitted to the Department of Chemistry: Organometallic Chemistry in Fe–S Clusters

Kosuke Yoshinaga
(September, 2021)
Thesis in the field of Chemistry submitted to the Department of Chemistry: A Showcase of Functional Fluorous Materials and Their Applications

Emily M. Zygiel
(September, 2021)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Investigation of Microbial Responses to Transition Metal Sequestration by the Innate Immune Protein Calprotectin

AWARDED JOINTLY WITH THE WOODS HOLE OCEANOGRAPHIC INSTITUTION,DOCTORAL

Doctor of Philosophy

Lydia Claire Babcock-Adams
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Molecular Characterization of Organically Bound Copper in the Marine Environment

EeShan Chetan Bhatt
(September, 2021)
Thesis in the field of Mechanical and Oceanographic Engineering submitted to the Department of Mechanical Engineering: An Virtual Ocean Framework for Environmentally Adaptive, Embedded Acoustic Navigation on Autonomous Underwater Vehicles

Henri Francois Drake
(September, 2021)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Control of the Abyssal Ocean Overturning Circulation by Mixing-Driven Bottom Boundary Layers

Daniel Michael Duane
(February, 2022)
Thesis in the field of Oceanographic Engineering submitted to the Department of Mechanical Engineering: The Effect of Attenuation from Fish on Long-Range Active and Passive Acoustic Sensing in the Ocean

Michaela Fendrock
Thesis in the field of Paleoclimate submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Questions and Clarity: Insights from Applying Computational Methods to Paleoclimate Archives

Mara Amelia Freilich
(September, 2021)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Vertical Fluxes in the Upper Ocean

Joleen Heiderich
(September, 2021)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: The Gulf Stream: Along-Stream Evolution of Volume Transport and Water Properties Observed by Underwater Gliders

Tianyi Huang
(September, 2021)
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Investigating Chromium Cycling in Global Oxygen Deficient Zones with Chromium Isotopes

Ian Thomas Jones
(September, 2021)
Thesis in the field of Marine Biology (jointly with WHOI) submitted to the Department of Biology: Assessing Anthropogenic Noise Impacts and Relevant Soundscape Cues for Marine Invertebrates: Leveraging Squid and Coral Reefs as Model Systems

Jennifer Shizu Karolewski
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Coupled Biogeochemical Cycling of Metals with Nitrogen and Carbon in Aquatic Environments

Marissa Morgan Kellogg
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Assessing the Potential for Zinc Limitation of Marine Primary Production: Proteomic Characterization of the Low Zinc Stress Response in Marine Diatoms

Jennifer An Kenyon
(February, 2022)
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Anthropogenic and Natural Radioisotopes as Tracers for Contaminant Sources and Particulate Fluxes

Kristen Railey Kita
(February, 2022)
Thesis in the field of Mechanical and Oceanographic Engineering submitted to the Department of Mechanical Engineering: Advances in Passive Acoustic Detection, Localization, and Tracking Applied to Unmanned Underwater Vehicles

Sheron You-Xian Luk
(February, 2022)
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Constraining Natural and Anthropogenic Disturbances in the Delivery of Coastal Ecosystem Services

Craig McLean
(September, 2021)
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Understanding how Nutrient Stress Distinguishes Phytoplankton Groups

Julien Thomas Middleton
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Barium Isotope Cycling in the Marine Environment: Pathways of Fractionation and Implications for Paleoceanographic Applications

Astrid Pacini
(February, 2022)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Structure, Variability, and Dynamics of the West Greenland Boundary Current System

Mallory Cecile Ringham
Thesis in the field of Chemical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: High Resolution, in-situ Studies of Seawater Carbonate Chemistry and Carbon Cycling in Coastal Systems Using Channelized Optical System II

Taylor Rae Sehein
(February, 2022)
Thesis in the field of Biological Oceanography submitted to the Department of Biology: Trojan Horses in the Marine Realm: Characterizing Protistan Parasite Ecology in Coastal Waters

William Joseph Shinevar
(September, 2021)
Thesis in the field of Geophysics submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Inferring the Thermomechanical State of the Lithosphere Using Geophysical and Geochemical Observables

Justin Joseph Suca
(September, 2021)
Thesis in the field of Biological Oceanography submitted to the Department of Biology: The Roles of Hydrography and Prey Availability on the Abundance and Distribution of Forage Fishes on the Northeast US Shelf, with a Particular Emphasis on Northern Sand Lance

MILITARY COMMISSIONS

United States Air Force

Second Lieutenant
Thomas S. Edelman
Kevin James
William J. Kuhl
Jacob T. McGuire
Matthew E. Schofield
Carson J. Smith
Delia S. Stephens

United States Army

Second Lieutenant
Chloe A.O. Brown
Sophia Chan
Erik M. Thompson

United States Navy

Ensign
Sean G. Crozier
Alassia N. Lang
Juliana R. Silldorff
Andrew M. Sorenson
Tyler C. Worthley

United States Space Force
Second Lieutenant
Violet C. Felt

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This book reflects the degree list as of May 20, 2022.

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