Degree of Engineer and Doctor of Philosophy Degrees as of 5/27/22

Department	Degree Type	Major	First Name	Middle Name	Last Name	Degree Candidate Te	Dissertation Title (PH.D's ONLY)	Chair(s)
Bioengineering	Doctor of Philosophy	Bioengineering	Chih-Chiang		Chang	Fall 2021	Multiscale Imaging and Machine-Learning Approaches to Investigate Cardiovascular and Metabolic Diseases	Tzung Hsiai, MD
Bioengineering	Doctor of Philosophy	Bioengineering	Pei-Shan		Chung	Fall 2021	Ultra-stretchable Electronic Rubber Band for Electrical Stimulation, Electromyography and Gastrointestinal Motility Monitoring	Pei-Yu Chiou
Bioengineering	Doctor of Philosophy	Bioengineering	Amy	Lauren	Cummings	Summer 2022	Integrating multimodal data for personalized models of cancer	Alex Bui
Bioengineering	Doctor of Philosophy	Bioengineering	Xingmin		Guan	Winter 2022	Noninvasive Imaging of Hemorrhagic Myocardial infarction with Confounder-Corrected T2* Cardic MRI	Rohan Dharmakumar
Bioengineering	Doctor of Philosophy	Bioengineering	Pei		Han	Spring 2022	Development of MRI Techniques for Tissue Characterization Using Magnetic Resonance Multitasking	Debiao Li
Bioengineering	Doctor of Philosophy	Bioengineering	Zhehao		Hu	Spring 2022	Advanced Magnetic Resonance Vascular Imaging: Technical Development and Application	Debiao Li and Zhaoyang Fan
Bioengineering	Doctor of Philosophy	Bioengineering	Eric	Andrew	Johnson	Fall 2021	Cardiac Magnetic Resonance Imaging-Guided Therapies for Chronic Hemorrhagic Myocardial Infarction	Holden Wu
Bioengineering	Doctor of Philosophy	Bioengineering	Joshua	James	Karam	Spring 2022	Development of Injectable, Hyaluronic Acid Based biomaterials	Song Li
Bioengineering	Doctor of Philosophy	Bioengineering	Jesse		Liang	Spring 2022	Matrix Mimetic Hydrogels for High-Throughput Screening	Stephanie Seidlits
Bioengineering	Doctor of Philosophy	Bioengineering	Alberto		Libanori	Winter 2022	Soft Bioelectronics for self-powered Neural Tissue Engineering	Jun Chen
Bioengineering	Doctor of Philosophy	Bioengineering	Yi		Luo	Summer 2022	Labe-free Bio-Aerosol Detection using Lens-less Microscopy	Aydogan Ozcan
Bioengineering	Doctor of Philosophy	Bioengineering	Thang	Le	Nguyen	Spring 2022	Measuring Cellular Mechanics with Quantitative Phase Microscopy	Michael S. Teitell, MD
Bioengineering	Doctor of Philosophy	Bioengineering	Joseph		Park	Winter 2022	Biomechanics of Optic Nerve Tethering in Adduction	Tzung Hsiai, MD
Bioengineering	Doctor of Philosophy	Bioengineering	Giovanni	Quinones	Quinones Valdez	Fall 2021	Function and Regulation of Nucleotide Variants in RNA	Xinshu Xiao
Bioengineering	Doctor of Philosophy	Bioengineering	Yudi		Sang	Spring 2022	Deformable image registration with learning	Dan Ruan
Bioengineering	Doctor of Philosophy	Bioengineering	Mark		Van Zee	Spring 2022	Lab-on-a-Particle Technologies to Democratize the Development of Monoclonal Antibody Therapies	Dino Di Carlo
Bioengineering	Doctor of Philosophy	Bioengineering	Yushan		Wang	Spring 2022	Novel Techniques for Neuromodulation and Neural Signal Analysis	Wentai Liu
Bioengineering	Doctor of Philosophy	Bioengineering	Tianran		Zhang	Winter 2022	Towards More Generalizable Machine Learning: Improving Model Robustness Against Clinical Event Sequence Shifts	Alex Bui and William Hsu
Bioengineering	Doctor of Philosophy	Bioengineering	Nicole (Hanyue)		Zhou	Winter 2022	Medical Note and Image Processing with Physival Models and Deep Learning Techniques	Dan Ruan
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Adrian		Acosta	Spring 2022	Engineering of FeGa and HfO2 Interfaces for Magnetoelectric Applications	Jane Chang
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Abdulaziz Mohammed	A	Alamer	Winter 2022	CO2 Conversion to value-added Chemicals: Thermodynamic and Indium-based catalysts studies	Vasilios Manousiouthakis
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Laurence		Chen	Spring 2022	Outsmarting and Outmuscling Cancer Cells for Next-Generation CAR-T Cell Therapies	Yvonne Chen
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Siyao (Scarlett)		Chen	Spring 2022	A Machine Learning-Based Approach to Cybersecurity and Safety of Model Predictive Control Systems	Panagiotis Christofides
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Yian		Chen	Spring 2022	Performance Tuning of Responsive Polymeric Ultrafiltration and Reverse Osmosis Membranes via Surface Nano-structuring with Tethered Poly(acrylic acid) Chains	YoramCohen
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Robert		Dimatteo	Fall 2021	Democratized Microdroplet Technologies for the Analysis of Single Immune Cell Secretions	
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Alexis	Kyle	Fortini	Spring 2022	Ion Transport in Lithium-ion Batteries with Heterogeneous Electrolyte Systems	Yunfeng Lu
[redacted]								
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Masih		Jorat	Winter 2022	Sustainability over Sets	Vasilios Manousiouthakis
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Sohyung		Lee	Winter 2022	Microfabrication of Three-Dimensional Complex Structures for Biomedical Applications	Dino DiCarlo
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Defu		Li	Spring 2022	n/a	Samanvaya Srivastava
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Eric	Tung Hua	Lin	Spring 2022	Zn site requirements for conversion of oxygenates on Zn-exchanged BEA zeolites	Dante Simonetti
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Yi Ming		Ren	Spring 2022	Machine Learning Modeling with Application to Laser Powder Bed Fusion Additive Manufacturing Process	Panagiotis Christofides
[redacted]								
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Yenwen		Tseng	Spring 2022	Electrochemically enhanced amine regeneration process for next generation carbon dioxide capture	Dante Simonetti

Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	George	Xu	Yan	Summer 2022	Theoretical Modeling of Metal Oxide-Supported Single Atom Catalysts under Reactive Gas Environments	Philippe Sautet
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Danielle	Ashley	Yee	Spring 2022	n/a	Yi Tang
Chemical and Biomolecular Engineering	Doctor of Philosophy	Chemical Engineering	Zhengrong		Zheng	Summer 2022	Amplification-Free Detection of 16S rRNA for Next Generation Point of Care Diagnostics	Harold Monbouquette
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Annesh		Borthakur	Spring 2022	Design of regenerative stormwater biofilters for long term removal of legacy and emerging pollutants	Sanjay Mohanty
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Tien-Shu		Chang	Fall 2021	Freeze-thaw Damage of Hybrid Fiber-reinforced Concrete Containing Microencapsulated Phase Change Material	Jiann-Wen Ju
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Victor	Alejandro	Contreras	Spring 2022	Characteristics of Subduction Zone Ground Motions with an Emphasis on Latin America	Jonathan P. Stewart
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Kayden		Haleakala	Spring 2022	Hydrological Underpinnings of Mountain Snowpack Responses to Warming Storms	Mekonnen Gebremichael
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Honglan		Huang	Fall 2021	Machine Learning-Based Decision Support to Enhance the Seismic Resilience of Distributed Infrastructure	Henry Burton
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Arpita		Iddya	Winter 2022	Facilitating Interfacial Processes for Specific Ion/Molecule Recovery	David Jassby
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Bongyeon		Jung	Spring 2022	Enhanced Desalination Performance of Pressure-driven Membrane Filtration using Electrically Conducting Membrane	David Jassby
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Vera	Smirnova	Koutnik	Spring 2022	Microplastic accumulation and transport in the subsurface under weathering cycles	Sanjay Mohanty
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Han		Liu	Fall 2021	Accelerated Design of Disordered Materials by Computational Simulation and Machine Learning	Mathieu Bauchy
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Yufei		Liu	Spring 2022	Assessing seasonal snowpack distribution and snow storage over High Mountain Asia	Steven Margulis
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Shengcun		Ma	Spring 2022	Electrochemical Detection and Removal of Heavy Metals in Water	David Jassby
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Jacob		Schaperow	Summer 2022	Using land surface modeling and remote sensing to improve streamflow estimates in ungauged basins	Steven Margulis
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Renan	Lucas	Valenca	Spring 2022	Resilience of stormwater treatment systems under changing climates	Sanjay Mohanty
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Kimberly		Wang	Spring 2022	Changes in Hydrologic Extremes: Impacts of Nonstationarity on Water Resource Management	Dennis Lettenmaier
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Zhe		Wang	Summer 2022	Physics- and data-driven modeling of silicate glasses	Mathieu Bauchy
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Yang		Yang	Fall 2021	Calibrated Fragility Functions for Seismic Loading of Sacramento-San Joaquin River Delta Levees	Scott Brandenberg
Civil and Environmental Engineering	Doctor of Philosophy	Civil Engineering	Haowen		Yue	Fall 2021	Evaluation of Short-Range and Medium- Range Precipitation Forecasts using Remote-Sensing Data	Mekonnen Gebremichael
Computer Science	Doctor of Philosophy	Computer Science	Wasi	Uddin	Ahmad	Fall 2021	Cross-lingual Representation Learning for Natural Language Processing	Kai-Wei Chang
Computer Science	Doctor of Philosophy	Computer Science	Xinzhu		Bei	Spring 2022	Learning Task-sufficient Representation of Video Dynamics	Stefano Soatto
Computer Science	Doctor of Philosophy	Computer Science	Zhaoxing		Bu	Spring 2022	Hybrid Heuristic Algorithms For Single-Agent Planning And Search	Richard Korf
Computer Science	Doctor of Philosophy	Computer Science	Xuelu		Chen	Fall 2021	Representation Learning based Query Answering on Knowledge Graphs	Carlo Zaniolo and Yizhou Sun
Computer Science	Doctor of Philosophy	Computer Science	YooJung		Choi	Spring 2022	Probabilistic Reasoning for Robust and Fair Decision Making	Guy Van den Broeck
Computer Science	Doctor of Philosophy	Computer Science	Vidushi		Dadu	Summer 2022	Generalizing Programmable Accelerators for Irregularity	Tony Nowatzki
Computer Science	Doctor of Philosophy	Computer Science	Manoj Reddy		Dareddy	Winter 2022	Emerging Paradigms for Privacy Preserving Recommender Systems	Junghoo Cho
Computer Science	Doctor of Philosophy	Computer Science	Rex	David	Fernando	Spring 2022	Round-Optimal Concurrent, Reusable Secure Multi-Party Computation Without Setup	Amit Sahai
Computer Science	Doctor of Philosophy	Computer Science	Lisa		Gai	Fall 2021	Computational methods for disease diagnosis and understanding the genetics of complex traits	Eleazar Eskin
Computer Science	Doctor of Philosophy	Computer Science	Migyeong		Gwak	Winter 2022	Internet of Things (IoT)-Enabled Health Monitoring Systems: Implementation and Validation	Majid Sarrafzadeh
Computer Science	Doctor of Philosophy	Computer Science	Tong		He	Fall 2021	Deep 3D Embodied Visual Recognition	Stefano Soatto
Computer Science	Doctor of Philosophy	Computer Science	Yuan		He	Fall 2021	Topological Characterization of Distributed Computability	Eliezer Gafni
Computer Science	Doctor of Philosophy	Computer Science	Brian	Lawrence	Hill	Fall 2021	Computational Methods for the Imputation and Prediction of Digital Health Data	Eran Halperin
Computer Science	Doctor of Philosophy	Computer Science	Aayush		Jain	Fall 2021	Indistinguishability Obfuscation from Well-Studied Assumptions	Amit Sahai
Computer Science	Doctor of Philosophy	Computer Science	Siva Kesava Reddy		Kakarla	Spring 2022	Formal Methods for a Robust Domain Name System	Todd Millstein and George Varghese
Computer Science	Doctor of Philosophy	Computer Science	Trent	M	Kyono	Fall 2021	Towards Causally-Aware Machine Learning	Mihaela van der Schaar
Computer Science	Doctor of Philosophy	Computer Science	Nathan		LaPierre	Spring 2022	Methods for refining genetic association and causal effect estimates	Eleazar Eskin
Computer Science	Doctor of Philosophy	Computer Science	Qianru		Li	Spring 2022	Mobility support for 5G and beyond: New challenges and novel solutions	Songwu Lu
Computer Science	Doctor of Philosophy	Computer Science	Zeyu		Li	Fall 2021	Improving Recommender Systems via Multimodal Information	Wei Wang
Computer Science	Doctor of Philosophy	Computer Science	Xuanqing		Liu	Fall 2021	Building Trustworthy Machine Learning Models	Cho-Jui Hsieh

Computer Science	Doctor of Philosophy	Computer Science	Nathan		Manohar	Fall 2021	High Precision Bootstrapping of Approximate Homomorphic Encryption	Amit Sahai
Computer Science	Doctor of Philosophy	Computer Science	Shaghayegh		Mardani	Winter 2022	Bridging the Performance Gap Between Mobile Applications and Mobile Web pages	Ravi Netravali
Computer Science	Doctor of Philosophy	Computer Science	Arthi		Padmanabhan	Spring 2022	Making Video Analytics Applications Efficient and Affordable	Harry Xu, Ravi Netravali
Computer Science	Doctor of Philosophy	Computer Science	Md Rizwan		Parvez	Spring 2022	Learning through Auxiliary Supervision for Multi-modal Low-resource Natural Language Processing.	Kai-Wei Chang
Computer Science	Doctor of Philosophy	Computer Science	Alana	Morgan	Ramjit	Fall 2021	Bridging the Gap Between Application Logic and Auto-optimization in Modern Data Analytics	Ravi Netravali and Todd Millstein
Computer Science	Doctor of Philosophy	Computer Science	Sandeep Singh		Sandha	Summer 2022	Learning-enabled Cyber-Physical Systems: Challenges and Strategies	Mani Srivastava
Computer Science	Doctor of Philosophy	Computer Science	Zhaowei		Tan	Spring 2022	System Security in 5G/4G/xG Mobile Networks: New Attacks and Countermeasures	Songwu Lu
Computer Science	Doctor of Philosophy	Computer Science	Jia	Shen	Teoh	Spring 2022	Automated Performance and Correctness Debugging for Big Data Analytics	Miryung Kim
Computer Science	Doctor of Philosophy	Computer Science	John	Vincent	Thorpe	Spring 2022	Affordable, Scalable, and Efficient Deep Learning Systems	Harry Xu
Computer Science	Doctor of Philosophy	Computer Science	Justin		Wood	Spring 2022	Knowledge discovery from biomedical and scientific text	Wei Wang
Computer Science	Doctor of Philosophy	Computer Science	Luyao		Yuan	Winter 2022	Communicative Learning: A Unified Learning Formalism	Song Chun Zhu
Computer Science	Doctor of Philosophy	Computer Science	Chi		Zhang	Summer 2022	A Unified Framework for Concept Learning from Few Examples: Raven's Progressive Matrices, Number Sense, and Odd-One-Out	Song-Chun Zhu
Computer Science	Doctor of Philosophy	Computer Science	Zhehui		Zhang	Summer 2022	Preventing and Mitigating Failures in Mobile Networks	Songwu Lu
Computer Science	Doctor of Philosophy	Computer Science	Jieyu		Zhao	Fall 2021	Building Accountable Natural Language Processing Models: on Social Bias Detection and Mitigation	Kai-Wei Chang
Computer Science	Doctor of Philosophy	Computer Science	Difan		Zou	Spring 2022	Understanding the Role of Optimization Algorithms in Learning Over-parameterized Models	Quanquan Gu
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Amber		Afshan	Winter 2022	Speaking Style Variability in Speaker Discrimination by Humans and Machines	Abeer Alwan
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Tzanis		Anevlavis	Spring 2022	A mithrilian approach to safety and robustness of autonomous cyber-physical systems	Paulo Tabuada
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Christopher	Inhwan	Baek	Winter 2022	Automated Computation of Hemodynamic Metrics Based on Non-invasive Electrophysiological and Biomechanical Features	William Kaiser
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Shi		Bu	Fall 2021	Programmable, High-Dynamic-Range Receiver Front-Ends Using Periodically Time-Varying Circuits	Sudhakar Pamarti
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Hao-Yuan		Chang	Spring 2022	Unitary Neural Networks	Kang Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Kai-Chi		Chang	Spring 2022	High-dimensional Quantum Information Processing with Time-Frequency Qudits	Chee Wei Wong
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Ting-Yuan		Chang	Fall 2021	Hybrid III-V Semiconductor Nanowires on Silicon	Diana L. Huffaker
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Tsang-Kai		Chang	Winter 2022	Robotic Spatial Autonomy: Multirobot Localization and Online SLAM	Ankur Mehta
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Xicheng		Duan	Spring 2022	Design and Optimization of Stacked Nanosheet FET and FinHBT for Ultra-Scaled SoC	M.C. Frank Chang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Melikasadat		Emami	Summer 2022	Asymptotics of Learning in Neural Networks	Alyson Fletcher
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Goutham		Ezhilarasu	Fall 2021	Flexible, Heterogeneously Integrated microLED Displays in Elastomeric Substrates using Fan-Out Wafer-Level Packaging	Subramanian Iyer
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Lucas Martin		Fraile Vazquez	Spring 2022	Data-driven Stabilization of Unknown Feedback-Linearizable and Partially Feedback-Linearizable Systems	Paulo Tabuada
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Wuran		Gao	Winter 2022	Tackling Measurement Uncertainties in Field-effect Transistor-based Biosensors	Wentai Liu
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Samer	Sarwat Nageeb	Hanna	Fall 2021	UAV Swarm Enabled Communications: System Design for Spectrum and Energy Efficiency with Security Considerations	Danijela Cabric
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Maziar		Hedayati	Summer 2022	Design of RF and Microwave Parametric Components	Yuanxun Ethan Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Rulin		Huang	Winter 2022	Spread Spectrum Based Digital-Intensive CMOS Radar System	M.C. Frank Chang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Jeya Vikranth		Jeyakumar	Spring 2022	Robust and Interpretable Predictions for Multimodal Sensor Systems	Mani Srivastava
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Xin		Jiang	Spring 2022	Primal-dual proximal optimization algorithms with Bregman divergences	Lieven Vandenberghe
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Albert		Lee	Fall 2021	Next-generation AI: From Algorithm to Device Perspectives	Kang Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Ken-Fu		Liang	Summer 2022	Simulation of brain-machine interfaces	Jonathan C. Kao
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Yuan		Liang	Winter 2022	User-Centered Deep Learning for Medical Image Analysis	Lei He
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Shuyu		Lin	Spring 2022	Ubiquitous non- and minimally-invasive biosensing technologies for personalized and precision medicine	Sam Emaminejad
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Hao		Liu	Winter 2022	Frequency comb generation in dispersion engineered Si3N4 microresonators and their applications	Chee Wei Wong
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Tairan		Liu	Summer 2022	Deep Learning on Microscopy Imaging	Aydogan Ozcan

Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Ping-Keng		Lu	Spring 2022	Telecommunication-Compatible, Plasmonics-Enabled Terahertz Sources and Detectors without Short-Carrier-Lifetime Photoconductors	Mona Jarrahi
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Qiujing		Lu	Winter 2022	Real-world High-dimensional Data with Multimodal Distributions: Mode Discovery and Mode-preserving Generative Models	Vwani Roychowdhury
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Kevin		Luong	Spring 2022	Spin Dynamics for Radio Frequency Applications	Yuanxun Ethan Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Onur		Memioglu	Fall 2021	A 300-GHz 52-mW CMOS Receiver with On-Chip LO Generation	Behzad Razavi
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Steven		Moran	Summer 2022	Analog In-Memory Multiply-and-Accumulate Engine Fabricated in 22nm FDSOI Technology	Subramanian Iyer
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Sumeet	Singh	Nagi	Winter 2022	Efficient, Scalable and High-Throughput Runtime Reconfigurable Arrays for Accelerator as a Service	Dejan Markovic
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Saptadeep		Pal	Fall 2021	Scale-Out Packageless Processing	Puneet Gupta and Subramanian S. Iyer
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Quanjun		Pan	Spring 2022	Magneto-Optical Investigation of Spintronic Materials for Ultrafast, Energy-Efficient Magnetization Switching	Kang Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Mohammadali		Panahi	Summer 2022	Low-Cost and Low-Power Phased Array Receiver for Wireless Communication and Sensing	Yuanxun Ethan Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Parthe		Pandit	Fall 2021	Exact analysis of inverse problems in high dimensions with applications to Machine Learning	Alyson K. Fletcher
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Anastasios		Papathanasopoulos	Spring 2022	3D-Printed Lenses, Flat-Layered Meta-Lenses, and Transmitarrays for Next-Generation Spaceborne Applications and Orbital Angular Momentum Beams	Yahya Rahmat-Samii
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Weikang		Qiao	Spring 2022	Customized Computing: Acceleration of Big-Data Applications	M.C. Frank Chang and Jason Cong
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Liang		Qiu	Winter 2022	Conversational Modeling with Human Values, Social Relations, Mental States, and Structure Learning	Achuta Kadambi
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Uneeb	Yaqub	Rathore	Winter 2022	Flexibility, Scalability, and Efficiency in Next-Generation Digital Signal Processors	Dejan Markovic
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Sam		Razavian	Spring 2022	Efficient Terahertz Transmitters and Receivers in Silicon for Broadband Sensing and High-Speed Wireless Communication	Aydin Babakhani
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Mojtaba		Sahraee Ardakan	Spring 2022	Estimation and Inference in High-dimensional Models	Alyson Fletcher
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Shadi		Shahsavari	Winter 2022	Automated Conspiracy Theory Detection and Narrative Consensus Tracking in Social Media	Vwani Roychowdhury
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Alimzhan		Sultangazin	Spring 2022	Privacy in Control over the Cloud and Learning Control from Expert Demonstrations	Paulo Tabuada
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Uros		Topalovic	Spring 2022	A wearable platform for decoding single-neuron and local field potential activity in freely-moving humans	Dejan Markovic
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Arash		Vahabpour	Spring 2022	Self-Organizing Generative Models for Diverse Imitation Learning	Vwani Roychowdhury
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Eric		Welch	Spring 2022	Nonlinear Propagation of Terawatt Long-wave Infrared Radiation in Air	Chand Joshi
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Chen		Wu	Spring 2022	Software and Hardware Co-optimization for Deep Learning Algorithms on FPGA	Lei He
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Zhuyun		Xiao	Fall 2021	Strain-mediated Multiferroics Heterostructures for Life Science Applications	Robert Candler
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Hengjie		Yang	Spring 2022	Efficient Reliable Communication in the Short Blocklength Regime Through List Decoding and Through Feedback	Richard D. Wesel
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Siyi		Yang	Fall 2021	Application-Driven Coding Techniques: From Cloud Storage to Quantum Communications	Lara Dolecek
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Gary	Joseph	Yeung	Fall 2021	Speech Normalization and Data Augmentation Techniques Based on Acoustical and Physiological Constraints and Their Applications to Child Speech Recognition	Abeer Alwan
Electrical and Computer Engineering	Doctor of Philosophy	Electrical and Computer Engineering	Peng		Zhang	Fall 2021	Understanding and Manipulation of Emerging Quantum Phases in Topological Insulators	Kang Wang
Electrical and Computer Engineering	Doctor of Philosophy	Electrical Engineering	Sundara	Rajan	Srinivasavaradhan	Fall 2021	Statistical Inference Applications in Bioinformatics and Epidemiology	Christina Fragouli
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Nelson	Ndukwe	Akwari	Fall 2021	Environmental Effects on a Protective Coating used to Mitigate Composite Degradation	Jenn-Ming Yang
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Danielle		Butts	Winter 2022	Next-generation Electrode Materials for Na- and Li-ion Batteries	Bruce Dunn
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Mutian		Hua	Fall 2021	Hierarchically Structured Hydrogels with High Strength, Toughness and Fatigue Resistance	Ximin He
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Shan		Huang	Spring 2022	Use of Dynamic Optical Contrast Imaging (DOCI) for Head & Neck Surgical Applications	Maie St. John
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Tianyi		Huang	Fall 2021	Towards High-Performance Tandem Photovoltaics Based on Metal Halide Perovskites	Yang Yang
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Zeyan		Liu	Summer 2022	Durable Pt-based Catalysts for Oxygen Reduction Reaction in Fuel Cell	Yu Huang
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Edgar		Olivera	Spring 2022		Tolbert, S.
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Zihang		Peng	Spring 2022	Dielectric Elastomer Based Devices: Compliant Electrodes and Dielectric Elastomers Materials Improvements	Qibing Pei
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Xia		Sang	Spring 2022	Plasma-Thermal Atomic Layer Etching of Metals	Jane P. Chang

Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Shaun Qi En		Tan	Spring 2022	Surface, Interface, and Defect Dynamics of Metal Halide Perovskites	Yang Yang
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Yekan		Wang	Spring 2022	Selective Area P-type Doping in Gallium Nitride Using Ion Implantation for High Power Applications	Mark Goorsky
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Nicholas	Abraham	Ware	Fall 2021	Transfer Kinetics and Analysis of Solid-Solid Electrochemical Interfaces	Bruce Dunn
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Grace		Whang	Summer 2022	Electrochemical Insights on Materials for Next Generation Batteries	Bruce Dunn
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Xuanyi		Wu	Spring 2022	Non-destructive Micro-spectroscopic Analysis of Biomolecules in Keratinous Systems for Interdisciplinary Materials, Biological and Archaeological Research	Ioanna Kakoulli
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Yao		Yang	Fall 2021	Atomic Electron Tomography and its Applications in Measuring Disorderness of Nanomaterials in 3D and 4D	Yu Huang and Jianwei Miao
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Christopher		Yeung	Spring 2022	Deep Learning for the Design and Characterization of Photonic Materials and Structures	Aaswath P. Raman
Materials Science and Engineering	Doctor of Philosophy	Materials Science and Engineering	Yepin		Zhao	Fall 2021	Towards High-Efficiency and Stable Metal Halide Perovskite Solar Cells: from Interior to Exterior	Yang Yang
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Dylan		Dickstein	Spring 2022	Reticulated Foam Materials for the Evaporative Cooling of Hypersonic Vehicles & for Control of Secondary Electron Emission in Space Electric Propulsion.	Nasr Ghoniem
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Michael		Guevara De Jesus	Winter 2022	Strain-Mediated Magnetoelectric Composites for Cell Sorting and Memory Devices	Greg Carman / Christopher Lynch
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Alan		Marquez-Razon	Fall 2021	Particle Grid Hybrid Methods for Multi-Material Dynamics	Jeff Eldredge and Joseph M. Teran
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Stephen	Anthony	Samples	Fall 2021	Miniature Ion Thruster Characterization via Discharge Plasma, Plume, and Mission Analyses	Richard Wirz
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Anirudh		Thuppul	Spring 2022	Lifetime Concepts for Electric Propulsion and Plasma-Facing Components	Richard Wirz
Mechanical and Aerospace Engineering	Doctor of Philosophy	Aerospace Engineering	Nolan	Michael	Uchizono	Spring 2022	Secondary Species Emission and Behavior for Electrospray Thrusters	Richard Wirz
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Leonardo		Araque	Spring 2022	Elastic Waves from Localized Sources with Applications to Nondestructive Evaluation (NDE) of Composite Aerospace Structures	Ajit Mal
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Yayun		Du	Spring 2022	Dynamic modeling of untethered soft flagellated locomotion in viscous fluids	M. Khalid Jawed
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Peter	Walker	Ferguson	Summer 2022	Dual Reconfigurable Exoskeleton Hand System with Opposable Thumbs	Jacob Rosen
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Yijun		Ge	Winter 2022	Multi-carrier Coupling and Hot Carrier Dynamics at Interfaces and Surfaces	Tim Fisher
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Arian		Ghazari	Winter 2022	The Influence of High-Temperature Plasticity on the Thermomechanical Behavior of Structural Materials in Power Conversion Systems	Nasr Ghoniem
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Kenneth		Gutierrez	Summer 2022	Model-free Approaches to Robotic Manipulation via Tactile Perception and Tension-driven Control	Veronica Santos
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Alireza		Haji Fathaliyan	Winter 2022	Data-driven Approaches to Enhance the Human Experience in Human-Robot Systems: Leveraging Eye Gaze for Intention Recognition and Trust Calibration	Veronica Santos
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Yu-Ching		Hsiao	Winter 2022	Magnetoelectric Devices and Multiscale Modeling	Christopher Lynch and Greg Carman
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Shengxin		Jia	Winter 2022	Haptic Exploration, and Map Rendering for Robots that Operate within Granular Materials	Veronica Santos
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Akshay	Bharadwaj	Krishna	Winter 2022	Technoeconomic optimization and thermohydraulic characterization of superalloy supercritical CO2 microtube shell-and-tube heat exchangers	Tim Fisher
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Mathieu Jacques Philippe		Le Provost	Winter 2022	Flow estimation with point vortex models	Jeff Eldredge
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Ryan	Hansen	Lee	Summer 2022	Mechanical Neural Networks	Jonathan Hopkins
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Yiqin		Liu	Fall 2021	Mechanisms of Nonlinear Oscillations in Biological Control System for Locomotion	Tetsuya Iwasaki
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Anil	Pradeep	Nair	Spring 2022	High-Speed Optical Diagnostics for Rotating Detonation Rocket Engine Analysis	Mitchell Spearrin
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	John	Austin	Nance	Fall 2021	Low-Energy Control of Magnetization Dynamics for Magnetic Computing	Greg P. Carman
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Dhruva	Sean	Nathan	Winter 2022	A silicon-based self-programming synaptic resistor network for neuromorphic computing	Yong Chen
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Eric	Richard	Peltola	Summer 2022	Artificial tactile sensing and human hand pose estimation in harsh environments	Veronica Santos
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Shahin		Rouhani	Fall 2021	Optimal Dynamic Inversion: Towards Safety, Reliability and Performance with Application to the Active Magnetic Bearing System	Tsu Chin-Tsao
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Zhenyu		She	Fall 2021	Roles Played by Heater Size, Contact Angle, Surrounding Vessel Size, and Surface Structure during Pool Boiling on Horizontal Surfaces	Vijay Dhir
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Paymon		Shirazi	Fall 2021	Magnetostrictive Ferri & Antiferromagnetic Thin Films for Multiferroic Applications	Greg Carman
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Turan	Eylul	Simsek	Fall 2021	Radiation Transfer through Droplet-Covered Substrates: Simulations, Experiments, and Applications	Laurent P. Pilon

Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Castano	Sara	Vallejo	Fall 2021	Demonstration and Up-scaling of a Calcination-Free Calcium Hydroxide Production Route from Steel Slag by Aqueous Precipitation	Laurent P. Pilon and Gaurav N. Sant
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Haoran		Wang	Winter 2022	Automation in Dental and Eye Surgery	Jacob Rosen
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Xiaoyu		Wang	Fall 2021	Eye Gaze-based Approaches to Recognize Human Intent for Shared Autonomy Control of Robot Manipulators	Veronica Santos
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Qi		Wu	Fall 2021	Multimodal Communication for Embodied Human-Robot Interaction with Natural Gestures	M. Khalid Jawed and Jungseock Joo
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Wenzhong		Yan	Summer 2022	Printable Mechanical Autonomy	Jonathan Hopkins
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Yi		Yan	Summer 2022	Experimental and Numerical Investigation of Mixed-convection Magnetohydrodynamic (MHD) Flows for Liquid Metal Fusion Blankets	Mohamed Abdou
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Ning		Yu	Spring 2022	Plastron State and Drag Reduction of High-Performance Superhydrophobic (SHPo) Surfaces in High-Speed Turbulent Flows on Open Water	Chang-Jin "CJ" Kim
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Pengkang		Yu	Winter 2022	An Over-Actuated Multi-Rotor Aerial Platform and Iterative Learning Control Applications	Tsu-Chin Tsao
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Qianran		Yu	Winter 2022	Modeling the mechanical behavior and microstructure evolutions of irradiated nuclear materials using the coupled kinetic rate theory and continuum crystal plasticity method	Jaime Marian
Mechanical and Aerospace Engineering	Doctor of Philosophy	Mechanical Engineering	Mahsa		Zakeri	Winter 2022	Nonreciprocal Parametric Amplification of Elastic Waves Applications in RF Front Ends	Greg Carman an Christopher Lynch