

Award Type	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor Department	Project Title
Salary Award	Ibrahim	Abdeally	Mechanical Engineering (ME)	Ellen	Mazumdar	Mechanical Engineering	Bio-Inspired Pulsating Xenia Coral Soft Robot with Compliant Electromagnetic Actuation
Salary Award	Raghav	Acharya	Chemical and Biomolecular Engineering (CHBE)	Saad	Bhamla	Chemical and Biomolecular Engineering	Quantification of Emergent Damping Properties in Human Joints
Salary Award	Peter	Addison	Physics (PHYS)	Sven	Simon	Earth and Atmospheric Sciences	Relativistic Electron Dynamics in Europa's Perturbed Electromagnetic Environment
Salary Award	Aria	Amthor	Mechanical Engineering (ME)	Ellen	Mazumdar	Mechanical Engineering	Hybrid Fluid and Tensile Actuation for Compliant Locomotion
Salary Award	Jude	Augustine	Aerospace Engineering (AE)	Marilyn	Smith	Aerospace Engineering	Reduced Order Modeling of Engine Effects on Aerodynamics for Design, Modeling, and Simulation
Salary Award	Ashi	Awasthi	Biomedical Engineering (BMED)	YongTae	Kim	Mechanical Engineering	Application of Induced Pluripotent Stem Cells For Endothelial Monolayer Formation in In-Vitro Blood-Brain Barrier Model
Salary Award	Younmin	Bae	Computer Science (CS)	Hvesoon	Kim	Computer Science	SLAM on Distributed Robotic Systems
Salary Award	James	Barnford	Materials Science and Engineering (MSE)	Mark	Losogo	Materials Science and Engineering	Effect of Polymer Reactivity and Process Temperature on the Glass Transition of Vapor Phase Infiltrated (VPI) Hybrid Materials
Salary Award	Tanner	Bead	Mechanical Engineering (ME)	Ye	Zhao	Mechanical Engineering	Robust perception for dynamic grasping skills in clutter
Salary Award	Andres	Begazo	Biomedical Engineering (BMED)	Levi	Wood	Mechanical Engineering	Characterization of Microglial Immune Function in Response to Alzheimer's Pathology
Salary Award	Walter	Benson	Mechanical Engineering (ME)	Marilyn	Smith	Aerospace Engineering	Propeller and Rotor Performance Assessment for Urban Air Mobility
Salary Award	Sarah	Ben-Yoseph	Chemical and Biomolecular Engineering (CHBE)	Nian	Liu	Chemical and Biomolecular Engineering	Rechargeable Silver Sponge Zinc Batteries: A Safer Alternative to Lithium-Ion While Maintaining High Energy Qualities
Salary Award	Taylor	Blackburn	Biochemistry (BCHM)	Amitt	Reddi	Chemistry and Biochemistry	The development of new fluorescent biosensors to probe the mechanisms underlying the insertion of heme into hemoglobin
Salary Award	Samantha	Bordy	Mechanical Engineering (ME)	Susan	Thomas	Mechanical Engineering	Engineered Lymph Node Sinus On-A-Chip to Elucidate Mechanisms of Lymphatic Metastasis
Salary Award	Isabella	Bowland	Chemical and Biomolecular Engineering (CHBE)	Mark	Prausnitz	Chemical and Biomolecular Engineering	Assessing the Safety of a New Method of Retinal Drug Delivery
Salary Award	Amshumanth	Chakragiri	Biomedical Engineering (BMED)	Wilbur	Lam	Biomedical Engineering	Quantification and prediction of adverse neurological events in sickle cell anemia magnetic resonance angiography imaging
Salary Award	Ajanta	Choudhury	Biology (BIO)	Matthew	Torres	Biological Sciences	Creating Ste18 Phospho-Mutants
Salary Award	Ji	Chun	Electrical Engineering (EE)	Thomas	Gavlord	Electrical and Computer Engineering	High-Speed, High-Resolution 3D Quantitative Phase Imaging in Biomedicine
Salary Award	Robert	Dabagia	Computer Engineering (CMPE)	Eva	Dyer	Biomedical Engineering	Online Distribution Alignment for Neural Decoding
Salary Award	Sarah	Dagher	Chemistry (CHEM)	MG	Finn	Chemistry and Biochemistry	Virus Like Particles as a Delivery Vehicle for Small Molecule Cargo
Salary Award	Annamarie	Eustice	Environmental Engineering (ENVE)	Marta	Hatzell	Mechanical Engineering	Investigating efficiencies of hybrid electrodes in performing electrochemical separations of brackish water through membrane CDI
Salary Award	Sarah	Freeman	Neuroscience (NEURO)	Thackery	Brown	Psychology	Stress effects on the ability to learn statistical regularities about our world
Salary Award	Subbarao	Garlapati	Computer Science (CS)	Joseph	Lachance	Biological Sciences	Quantifying Genetic Load in Admixed Individuals
Salary Award	Joseph	Harrison	Chemical and Biomolecular Engineering (CHBE)	Saad	Bhamla	Chemical and Biomolecular Engineering	Ultrasonic Drying of Nanocellulose
Salary Award	Glycmyi	Hernandez	Biomedical Engineering (BMED)	Stanislav	Emelianov	Electrical and Computer Engineering	Development of a Tissue and Jugular Vein Model for Real Time Photoacoustic Imaging Blood Oxygen Saturation Measurements for Trau
Salary Award	Jacob	Holt	Biology (BIO)	Peter	Yunker	Physics	Effect of Flow Regime on Evolution of Clonal Clusters in <i>Saccharomyces cerevisiae</i>
Salary Award	Yizhi	Huang	Industrial Engineering (IE)	Gleb	Yushin	Materials Science and Engineering	Iron Fluoride Carbon Nanofibers in Sodium Ion Batteries
Salary Award	Andrew	Inman	Biomedical Engineering (BMED)	Shu	Jia	Biomedical Engineering	Design and Construction of a Miniaturized Light Field Endoscope System
Salary Award	Benjamin	Jean	Chemistry (CHEM)	Mark	Losogo	Materials Science and Engineering	Connecting Variations in Chain Mobility in Vapor Phase Infiltrated Poly(ethylene terephthalate) Hybrid Materials to Macroscopic
Salary Award	Kathryn	Jones	Chemical and Biomolecular Engineering (CHBE)	Woon-Hong	Yeo	Mechanical Engineering	Low-Profile, Flexible Electrochemical Biosensor for a Smart Bioreactor Integration
Salary Award	Katherine	Joseph	Biomedical Engineering (BMED)	Valeria	Milam	Materials Science and Engineering	Identifying DNA Aptamer Candidates for a Molecular Cancer Target Ceramide
Salary Award	Nuzhat	Kabir	Biomedical Engineering (BMED)	Mark	Prausnitz	Chemical and Biomolecular Engineering	Synthesis and Topical Delivery of Pilocarpine Ionic Liquids
Salary Award	Austin	Karesh	Neuroscience (NEURO)	Michelle	Pardue	Biomedical Engineering	Neuroprotective Effects of Voluntary Exercise in a Retinal Degeneration Mouse Model
Salary Award	Maxwell	Kazman	Chemical and Biomolecular Engineering (CHBE)	Mark	Stevcznski	Chemical and Biomolecular Engineering	Building a cell-free biosensor to quantify a pathogenic infection with a glucose monitor
Salary Award	Abhishek	Khandal	Aerospace Engineering (AE)	Tim	Lieuwen	Aerospace Engineering	Counter Rotating Vortex Pair Structure in a Reacting Jet in Vitrated Crossflow
Salary Award	Keyana	Komilian	Biomedical Engineering (BMED)	David	Hu	Mechanical Engineering	Metabolic Scaling of Fire Ants Under Heat Stress
Salary Award	Kristian	Lockyear	Chemical and Biomolecular Engineering (CHBE)	Andrey	Gunawan	Mechanical Engineering	High Temperature Thermophysical Property Measurement of Containment Materials
Salary Award	Angela	Luo	Neuroscience (NEURO)	Young-Hui	Chang	Biological Sciences	Investigating Asymmetrical Adaptation to Reduced Gravity
Salary Award	Shruthi	Murali	Chemical and Biomolecular Engineering (CHBE)	Ravi	Kane	Chemical and Biomolecular Engineering	Design of "Universal" Influenza Vaccines by Bivalent Antigenic Suppression
Salary Award	Carson	Myers	Music Technology (MUSIC)	Grace	Leslie	Music	Mild Cognitive Impairment Empowerment Through Music Technology
Salary Award	Brandon	Nguyen	Biomedical Engineering (BMED)	Julia	Babensee	Biomedical Engineering	3D Co-Culture Interplay in an in vitro Breast Cancer Tumor Model
Salary Award	Tena	Nguyen	Biology (BIO)	Stefan	France	Chemistry and Biochemistry	Synthesis of Substituted Indoles from $\alpha$ -diazo- $\beta$ -keto Esters and Enol Ethers
Salary Award	Amulya	Noone	Neuroscience (NEURO)	Michael	Borich	Biomedical Engineering	Neuromodulatory Mechanisms Underlying Cortical Oscillatory Activity During Post PAS Activity
Salary Award	Sahaj	Patel	Aerospace Engineering (AE)	Glenn	Lightsey	Aerospace Engineering	Development of an Additively Manufactured, Green Monopropellant Thruster for the NASA JPL Lunar Flashlight CubeSat Mission
Salary Award	Jacob	Peloquin	Mechanical Engineering (ME)	Gregory	Sawicki	Mechanical Engineering	Development of a Passive, Durable, Low-Profile Ankle Exoskeleton
Salary Award	Robert	Petrie	Materials Science and Engineering (MSE)	Mark	Losogo	Materials Science and Engineering	Predicting Properties of ALD Films through Machine Learning
Salary Award	Jiankun	Pu	Mechanical Engineering (ME)	Seung Woo	Lee	Mechanical Engineering	Aluminum Oxide Composite and Carbon Nanotube-Based Bifunctional Separators for High-Performance Lithium Sulfur Batteries
Salary Award	Nina	Qin	Computational Media (CM)	Joycelyn	Wilson	Literature, Media, & Communication	Increasing Efficacy of Education Technology through Hip-Hop-Based Pedagogical Affordances
Salary Award	Suraj	Rajendran	Biomedical Engineering (BMED)	Shu	Jia	Biomedical Engineering	Enhancing Temporal Resolution of Optical Microscopy Through Dimensional Reduction
Salary Award	Vignesh	Raman	Electrical Engineering (EE)	Mathieu	Bloch	Electrical and Computer Engineering	Quantum Steganographic Capacity of Lossy Bosonic Channels
Salary Award	Manuel	Regalado	Materials Science and Engineering (MSE)	Jenny	McGuire	Earth and Atmospheric Sciences	Incorporating Ecological Values in the Design of Protected Areas: A Holistic Analysis of Protected Area Categories in the United
Salary Award	Catuviva	Selva	Biomedical Engineering (BMED)	Shuichi	Takayama	Biomedical Engineering	Modeling the Effect of Pulmonary Edema on the Airways in a Microfluidic Device
Salary Award	Shanmugan	Selvamurugan	Aerospace Engineering (AE)	Mitchell	Walker	Aerospace Engineering	Fabrication of a Field Emission CNT-based Cathode as a Charge Neutralization Mechanism for EP Spacecraft in a Plasma Environment
Salary Award	Saba	Shaik	Aerospace Engineering (AE)	Claudio	Di Leo	Aerospace Engineering	Mechanical characterization of the deformation-diffusion behavior of swellable elastomers
Salary Award	Omar	Shaikh	Computer Science (CS)	Duen Hong (Polo)	Chau	Computational Science & Engineering	NMTDebug: An Interactive Tool For Visualizing And Debugging Translation Models
Salary Award	Evan	Shi	Electrical Engineering (EE)	Gregory	Durgin	Electrical and Computer Engineering	Circular Patch Reflectarray Design for a Technology Demonstration of Wireless Power Transfer Using a Fully Transparent Rectenna
Salary Award	Hyoungjun	Sim	Biomedical Engineering (BMED)	Gabriel	Kwong	Biomedical Engineering	Genetically Engineering Cells to Model Immune Resistance During Cancer Immunotherapy
Salary Award	Ethan	Smith	Biochemistry (BCHM)	Stanislav	Emelianov	Electrical and Computer Engineering	A New Model of Atherosclerosis in Mice
Salary Award	Paige	Steppe	Chemical and Biomolecular Engineering (CHBE)	Mark	Stevcznski	Chemical and Biomolecular Engineering	Development of a Cell-Free Zinc Biosensor Quantified Utilizing a Personal Glucose Monitor
Salary Award	Sophia	Sukkestad	Biology (BIO)	Frank	Rosenzweig	Biological Sciences	Competition Assays in Laboratory-Evolved Multicellular and Wild-Type Unicellular <i>Chlamydomonas reinhardtii</i>
Salary Award	Yici	Sun	Materials Science and Engineering (MSE)	Mark	Losogo	Materials Science and Engineering	Investigation of Crystallization in Zirconium Dioxide Thin Films Grown via Atomic Layer Deposition (ALD)
Salary Award	Jack	Terrell	Chemical and Biomolecular Engineering (CHBE)	Natalie	Stingelin	Materials Science and Engineering	Investigating Interpenetrating Polymer Network Hydrogels for Organic Bioelectronics
Salary Award	Chandler	Thompson	Aerospace Engineering (AE)	Mitchell	Walker	Aerospace Engineering	Plasma Actuators and Flow Separation on Airfoils
Salary Award	Cassidy	Tobin	Chemical and Biomolecular Engineering (CHBE)	Paul	Kohl	Chemical and Biomolecular Engineering	Continuous flow synthesis of o-phthalaldehyde copolymers for transient devices.
Salary Award	Stephen	Tong	Computer Science (CS)	Taesoo	Kim	Computer Science	Machine Learning-Assisted Structure-Aware Fuzzing
Salary Award	Lily	Topp	Biology (BIO)	Pamela	Peralta-Yahya	Chemistry and Biochemistry	A Machine Learning Approach to Efficient Olfactory Receptor Deorphanization
Salary Award	John	Tyner	Chemical and Biomolecular Engineering (CHBE)	Nian	Liu	Chemical and Biomolecular Engineering	Catalytic Electrochemical Reduction of Liquid CO <sub>2</sub> in a CO <sub>2</sub> -Methanol Medium with Varied Inorganic Salts
Salary Award	Zhengyang	Weng	Mechanical Engineering (ME)	Ye	Zhao	Mechanical Engineering	Athena Humanoid Upper Body Robot Design and Kinematics-based Motion Planning
Salary Award	Corinna	Wester	Biomedical Engineering (BMED)	Cheng	Zhu	Biomedical Engineering	Costimulatory Streptavidin Beads for Understanding Immune Synapse Signaling and Function
Salary Award	Brandon	White	Biomedical Engineering (BMED)	Dr. Cassie	Mitchell	Biomedical Engineering	Predictive medicine to improve bacterial infection prophylaxis therapy in pediatric acute leukemias
Salary Award	Kent	Yamamoto	Biomedical Engineering (BMED)	Jaydev	Desai	Biomedical Engineering	Computer visualization of pediatric phantom brain model and clinical testing of endoscopic neurological robot
Salary Award	William	York	Biomedical Engineering (BMED)	Edward	Botchwey	Biomedical Engineering	Increasing Exosome Production by Mesenchymal Stem Cells in Bacterial Sphingomyelinase-Conjugated PEG-MAL Hydrogels
Salary Award	Nadia	Zaragoza	Materials Science and Engineering (MSE)	Blair	Brettmann	Materials Science and Engineering	PAA-PEI complex coacervation for radioactive material capture
Salary Award	Alec	Zhan	Biology (BIO)	Ravi	Kane	Chemical and Biomolecular Engineering	Creating a Surrogate Wnt5a Agonist from Anti-ROR2 and Anti-Frizzled Antibody Fragments
Salary Award	Zhiyuan	Zhang	Mechanical Engineering (ME)	Panagiotis	Tsiotras	Aerospace Engineering	Small scale autonomous vehicle
Salary Award	Zhaoxian	Zhang	Materials Science and Engineering (MSE)	Paul	Russo	Materials Science and Engineering	Study of Hydrophobic Membrane Mechanics for Application in Micro-robotics

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Salary Award	Ziyang	Zhang	Mechanical Engineering (ME)	Ye	Zhao	Mechanical Engineering	Model and Control of Robust Contact-Rich Manipulation Skills
Salary Award	Qingyang	Zhao	Biomedical Engineering (BMED)	Gabriel	Kwong	Biomedical Engineering	Harnessing T Cell Immunity for Thwarting Influenza
Travel Award	Adriana	Amyette	Computer Science (CS)	Hvesoon	Kim	Computer Science	Towards a General Purpose Cognitive Drone
Travel Award	Adrianna	Bernardo	Biomedical Engineering (BMED)	Kali	Morgan	Biomedical Engineering	ePortfolios as a "meta-HIP": Evidence from a summer study abroad experience
Travel Award	Gaurav	Byagathvalli	Industrial Engineering (IE)	Saad	Bhamla	Chemical and Biomolecular Engineering	Leveraging the physics of a barbecue lighter to genetically transform living organisms
Travel Award	Kathryn	Earles	Public Policy (PUBP)	Omar	Asensio	Public Policy	Behavioral Incentives for Children and Their Parents to Reduce Energy Consumption
Travel Award	Tyrus	Evans	Aerospace Engineering (AE)	Ellen	Mazumdar	Mechanical Engineering	Digital Phase Holography for Numerical Shock-wave Distortion Cancellation
Travel Award	Biva	Haile	Mechanical Engineering (ME)	Paul	Joseph	Electrical and Computer Engineering	Three-dimensional Printing of Carbon Nanostructures
Travel Award	Patrick	Heritier-Robbins	Environmental Engineering (ENVE)	Kostas	Konstantinidis	Civil and Environmental Engineering	Crude Oil Disturbance Selects for Generalists, not Specialists, in a Beach Sand Microbial Community
Travel Award	Kyle	Jiang	Mechanical Engineering (ME)	Rosario	Gerhardt	Materials Science and Engineering	Inkjet-Printed Carbon Nanotube Depositions for Electrochemical Supercapacitor Electrodes
Travel Award	Sam	Jijina	Computer Science (CS)	Hvesoon	Kim	Computer Science	Towards a General Purpose Cognitive Drone
Travel Award	Saiharshith	Kilaru	Computer Engineering (CMPE)	Andrew	Peterson	Electrical and Computer Engineering	An Investigation of Micromotor Technology Enabling Mechanically Reconfigurable Reflectarrays
Travel Award	Kyung Il	Kim	Chemical and Biomolecular Engineering (CHBE)	Seung Soon	Jang	Materials Science and Engineering	Water and Carbon Dioxide in Hydrated Hyperbranched Polyethylenimine Membrane Using MD Simulation and Density Functional Theory
Travel Award	Sarah	Lowry	Environmental Engineering (ENVE)	Joe	Brown	Civil and Environmental Engineering	Microbial Water Quality in Intermittent versus Continuous Water Supply in Nagpur, India
Travel Award	Chandler	Mason	Computer Engineering (CMPE)	Joshua	Roper	Electrical and Computer Engineering	Project PhoenixEve
Travel Award	Catherine	Moore	Public Policy (PUBP)	Omar	Asensio	Public Policy	Behavioral Incentives on Children and Their Parents to Reduce Energy Consumption
Travel Award	Andrew	Pan	Biomedical Engineering (BMED)	Todd	Sulchek	Mechanical Engineering	Janus micromotors improve the catalytic efficiency of immobilized enzymes
Travel Award	Cassidy	Tobin	Chemical and Biomolecular Engineering (CHBE)	Paul	Kohl	Chemical and Biomolecular Engineering	Optimizing the Performance of Polyvaldehydes as Dry-Developed Photoresists
Travel Award	Robert	Turko	Computer Science (CS)	Duen (Polo)	Chau	Computational Science & Engineering	CNN 101: Interactive Visual Learning for Convolutional Neural Networks
Travel Award	Vaibhav	Vasudevan	Materials Science and Engineering (MSE)	Seung	Jang	Materials Science and Engineering	DNA Adsorption on Graphene: DFT Modeling Approach
Travel Award	Samuel	Weiss-Cowie	Applied Languages and Intercultural Studies (ALIS)	Seung-Eun	Chang	Modern Languages	Hyper-articulation in Korean glides by heritage language learners
Travel Award	Sophia	Wiesenfeld	Biology (BIO)	Brian	Hammer	Biological Sciences	CRP mediates commensal Escherichia coli resistance against pandemic Vibrio cholerae Type VI Secretion System attack
Travel Award	Julia	Woodall	Biomedical Engineering (BMED)	Allyson	Tant	Biomedical Engineering	Leveraging computational fluid dynamic modeling to elucidate the mechanical artifacts of simulated microgravity
Travel Award	Nadia	Zaragoza	Materials Science and Engineering (MSE)	Blair	Brettmann	Chemical and Biomolecular Engineering	Increasing sustainability of papermaking using polyelectrolyte complex coacervates