Awards Received July 1, 2018 - June 30, 2019

COLLEGE OF ENGINEERING
Dr. Eugene Olevsky, Dean
Office of the Dean

Ms. Theresa Garcia
U.S. Department of Defense Office of Naval Research: “Advancing Navy STEM Workforce through Education and Research (ANSWER),” $250,964

Dr. Eugene Olevsky
University of California Office of the President: “Math, Engineering, Science Achievement (MESA) Oracle Summer Program,” $8,688; “Math, Engineering, Science Achievement (MESA) MESA Schools Program (MSP),” $360,000

Total: $368,688

Aerospace

Dr. Ahmad Bani Younes
American Astronautical Society: “John V. Breakwell Student Travel Award,” $1,000

NASA Jet Propulsion Laboratory: “Parallel Propagation Techniques that Leverage Modern Computing for Improved Spacecraft Navigation,” $22,000

Texas A&M Engineering Experiment Station: “Efficient and Parallel Implementation of Modified Chebyshev Picard Iteration Integrating Perturbed Orbital Motion,” $65,000

Risk reduction hardware-in-the-loop experiments for spacecraft Guidance, Navigation, and Control (GNC) functions using a small-scale 3DOF of experimental attitude platform
PI and photo: Ahmad Bani Younes

Total: $88,000

Dr. Gustaaf Jacobs
National Science Foundation: “NAHOMCon: North American High Order Methods Conference,” $25,000

University of Southern California: “Control of Lagrangian Coherent Structures at Stagnation and Separation Location on Airfoils,” $102,451

Total: $127,451

Dr. Xiaofeng Liu

National Science Foundation: “An International Travel Proposal to Attend the 13th International Symposium on Particle Image Velocimetry (ISPIV),” $4,531

Total: $26,331
Jose Moreto, a graduate student in the SDSU/UCSD joint doctoral program, adjusts the lens aperture setting for the high-speed camera used for the test section freestream turbulence characterization survey in the newly built SDSU water tunnel lab. PI and photo: Xiaofeng Liu

**Dr. Ping Lu**


**Total: $308,009**

**Dr. Satchi Venkataraman**


National Aeronautics and Space Administration: “NASA Fellowship,” $165,000

**Total: $214,964**

**Civil & Environmental Engineering**

**Dr. Thais Alves**

Construction Industry Institute: “Challenges and Opportunities to Promote Collaborative Scheduling in Construction Projects,” $78,397

**Total: $78,397**

**Dr. Robert Dowell**

General Dynamics NASSCO: “Swage Bulkhead Details Study,” $145,308

**Total: $145,308**

**Dr. Temesgen Garoma**

Metropolitan Water District of Southern California: “A New Approach for Seawater Desalination,” $10,000

**Total: $10,000**

**Dr. Sahar Ghanipoor-Machiani and Dr. Arash Jahangiri**

San Jose State University Foundation: “Impact of Right-of-way Adaptation to Automated Vehicles on Driver Behavior; A Narrow AV-exclusive Lane on an Existing Smart Freeway,” $74,999

Virginia Polytechnic Institute and State University: “Safety through Disruption (Safe-D) University Transportation Center (UTC),” $233,402

**Total: $308,401**
Dr. Alicia Kinoshita
National Science Foundation: “Coupling Post-fire Vegetation and Volumetric Sediment Regimes in Urban Mediterranean Systems,” $226,083


Dr. Natalie Mladenov


Dr. Matthew Verbyla
National Science Foundation: “IRES: U.S. -Brazil Engineering and Social Science Collaboration: Expanding Perspectives on Water, Power, and Sustainability,” $300,000

Trussell Technologies: “Human-associated HF183 Bacteroides 16S rRNA Genetic Marker at North City Water Reclamation Plant and the Pure Water Facility,” $4,996

Professor Matt Verbyla (right) with Brazilian collaborators who presented at the Global Water Sustainability Symposium at SDSU
PI: Matthew Verbyla
Awards Received July 1, 2018 - June 30, 2019

Mr. Thomas Zink

Total: $428,719

U.S. Department of Defense Army Corps of Engineers: “Dune Enhancement to Support the California Least Tern and Western Snowy Plover at the Silver Strand Training Complex, Naval Base Coronado, California,” $60,000; “San Clemente Island Botanical Program Implementation, NALF San Clemente Island, Naval Base Coronado, California,” $368,719

Electrical & Computer Engineering

Dr. Baris Aksanli

Total: $77,000

CSU Fullerton Auxiliary Services Corporation: “GE Digital CSU Innovation Design Challenge,” $2,000

National Science Foundation: “Distributed Bayesian Learning and Safe Control for Autonomous Wildfire Detection,” $75,000

Dr. Madhu Gupta

Total: $127,880


Dr. Ke Huang

Total: $102,583

California State University Office of the Chancellor: “An Eco-driving System for Connected Automated Vehicles Based on Multi-Objective Trajectory Optimization,” $74,877

Innophase Inc. “Optimization of Semiconductor Manufacturing Process Based on Data Mining,” $27,706

Dr. Sunil Kumar

Total: $450,000


Dr. Chunting Mi

Total: $404,052

U.S. Department of Energy Argonne National Laboratory: “High Power Wireless Charging System,” $70,000

Awards Received July 1, 2018 - June 30, 2019

Snova Intelligent Technology LTD: “Development of State of Charge and State of Health Algorithms for 48V Hybrid Battery Packs,” $110,000

University of Michigan: “Planning Grant: Engineering Research Center for Comprehensive Energy Storage Solutions in Electrified Transportation (CESSET),” $7,000

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<tr>
<td><strong>Dr. Yusuf Ozturk</strong></td>
<td><strong>$50,000</strong></td>
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<td>National Science Foundation: “I-Corps: Ambient Sleep Architecture Monitor,” $50,000</td>
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<tr>
<td><strong>Dr. Satish Sharma</strong></td>
<td><strong>$179,916</strong></td>
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<tr>
<td><strong>Dr. Lal Tummala</strong></td>
<td><strong>$369,979</strong></td>
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<tr>
<td>Department of California Highway Patrol: “Testing Services for Police Traffic Radar and Laser Speed Measuring Devices,” $369,979</td>
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### Mechanical Engineering

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<tr>
<td><strong>Dr. Asfaw Beyene</strong></td>
<td><strong>$257,224</strong></td>
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<tr>
<td><strong>Dr. Subrata Bhattacharjee</strong></td>
<td><strong>$100,000</strong></td>
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<tr>
<td>National Aeronautics and Space Administration: “Residence Time Driven Flame Spread Over Solid Fuels,” $100,000</td>
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<tr>
<td><strong>Dr. Joaquin Camacho</strong></td>
<td><strong>$79,999</strong></td>
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<tr>
<td><strong>Dr. Randall German</strong></td>
<td><strong>$150,000</strong></td>
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<tr>
<td>National Aeronautics and Space Administration: “Multi-Scale Modeling and Experimentation on Liquid Phase Sintering in Gravity and Microgravity Environments,” $150,000</td>
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<td><strong>Dr. Samuel Kassegne</strong></td>
<td><strong>$311,371</strong></td>
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<tr>
<td>University of Washington: “National Science Foundation Engineering Research Center for Neurotechnology (CNT),” $311,371</td>
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<tr>
<td><strong>Dr. Parag Katira</strong></td>
<td><strong>$440,036</strong></td>
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National Science Foundation: “Collaborative Research: Heterogeneous Cancer Cell Mechanics Differentially Drives Mechanosensing and Migration,” $191,607; “Collaborative Research: Understanding the Interplay Between Mechanical and Stress Hormone Signaling,” $223,965

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<tr>
<td><strong>Dr. Karen May-Newman</strong></td>
<td><strong>$27,000</strong></td>
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<td>Abbott Vascular: “Effect of a Programmed &quot;Pulse&quot; on Flow in the Native Cardiovascular System During LVAD Support with the HeartMate III LVAD, Studied in a Mock Circulatory Loop,” $27,000</td>
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<tr>
<td><strong>Dr. Fletcher Miller</strong></td>
<td><strong>$13,518</strong></td>
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<td>San Diego State University: “ARPA-E Focus Project Post-Doc,” $13,518</td>
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Awards Received July 1, 2018 - June 30, 2019

**Dr. Kee Moon**
Kagoshima University: “International Academic Cooperation Program,” $7,500

Sejong University South Korea: “Winter Program at SDSU,” $65,100

Total: $72,600

**Dr. Khaled Morsi**
Universal Technical Resource Services Inc. “Spark Plasma Extrusion of Titanium Wire,” $26,208

Total: $26,208

**Dr. Peiman Naseradinmousavi**
National Science Foundation: “Collaborative Research: Decentralized Adaptive and Extremum Seeking Control of High-Degree of Freedom Manipulators with Image Processing,” $230,377

Total: $230,377

Experimental deep learning to a) detect 3D positions of objects through HSV-based scanning, b) determine orientation (angle) of an object, and c) generate obstacle avoidance trajectory

PI and photo: Peiman Naseradinmousavi

**Dr. Eugene Olevsky**


University of California Office of the President: “2018-2019 MESA Engineering Program (MEP),” $10,000; “Math, Engineering, Science Achievement (MESA) MESA Schools Program (MSP),” $180,000

Total: $449,971

**Dr. Wenwu Xu**
National Science Foundation: “ECCENTRIC: A Mechanism of Flash Sintering of Ionic Ceramics,” $218,380

Total: $218,380

**Dr. George Youssef**
NASA Jet Propulsion Laboratory: “Integrated Multifunctional 3D-Printed Space Structures,” $18,499


Total: $613,382