**AEROSPACE ENGINEERING**

Dr. Pavel Popov  
Ph.D., Cornell University, Ithaca, New York  
Assistant Professor of Aerospace Engineering

**Civil, Construction & Environmental Engineering**

Dr. Marta Miletić  
Ph.D., Kansas State University, Manhattan, KS  
Assistant Professor of Civil, Construction and Environmental Engineering

**Civil, Construction & Environmental Engineering**

Dr. Reza Akhavian  
Ph.D., University of Central Florida, Orlando, FL  
Assistant Professor of Civil, Construction and Environmental Engineering

**Electrical & Computer Engineering**

Dr. Junfei Xie  
Ph.D., University of North Texas, Denton, TX  
Assistant Professor of Electrical and Computer Engineering

**Areas of Specialization**

Dr. Pavel Popov  
Computational fluid dynamics and combustion; combustion-acoustic instability; rocket propulsion; plasma-combustion interactions; turbulent reactive flows; high-performance computing; stochastic methods and machine learning methods for reactive flows.

Dr. Reza Akhavian  
Strain localization in geo-materials; computational modeling of pressure sensitive materials; multiscale and multiphysics processes in geomechanics; soil improvement (fibers, (bio)polymers, geo-synthetics, industrial waste products); soil-structure interaction; thermally active geosystems; resilient and sustainable infrastructure materials; advanced geotechnical laboratory testing.

Dr. Junfei Xie  
Large-scale dynamic system design and control; spatiotemporal data analysis; unmanned aerial systems; airborne networks; air traffic flow management; complex information system.
MECHANICAL ENGINEERING

Dr. Sungbum (John) Kang  
Ph.D., Georgia Institute of Technology, Atlanta, GA  
Assistant Professor of Mechanical Engineering

Previous Position  
Resolution Enhancement Technology Design Engineer  
Intel Corporation

Areas of Specialization  
Optical Metrology; Mechatronics; Industrial Automation;  
Digital Fringe Projection; Moiré Interferometry; Phase Measuring Deflectometry; Machine Vision; Machine Learning;  
Optical Proximity Correction; Metrology Applications for Additive/Semiconductor/LCD/Solar-Cell Manufacturing.

Dr. Sung-Yong (Sean) Park  
Ph.D., University of California at Los Angeles, CA  
Assistant Professor of Mechanical Engineering

Previous Position  
Assistant Professor  
National University of Singapore, Singapore

Areas of Specialization  
Optofluidic solar power technologies (concentrated solar energy, solar indoor lighting, and solar spectrum splitting) for sustainable buildings; tribo-electric energy harvesting from waste water sources (e.g. raindrop, waterfall, ocean wave); smartphone-integrated environmental monitoring for on-site and real-time air/water quality detection; lab-on-a-smartphone (LOS) as an optofluidic portable device for automated sample preparation and on-chip microscopic detection.

MECHANICAL ENGINEERING

Dr. Yang Yang (Spring 2020)  
Ph.D., Wuhan University, Wuhan, China  
Joint Ph.D. student, University of California, Los Angeles, Los Angeles, CA  
Assistant Professor of Mechanical Engineering

Previous Position  
Postdoctoral Research Associate  
University of Southern California, Los Angeles, CA

Areas of Specialization  
Bioinspired 3D printing; Ceramic 3D printing; 3D printing of micro-scale superhydrophobic structure; Novel applications of 3D printing; Mechanism of materials and structures; Stereolithography; Piezoelectric/Thermoelectric Energy harvesting device; Wearable Sensor; 4D Printing; High Dielectric Nanocomposites; Self-healing Materials.