

## **AEROSPACE ENGINEERING**



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

### **Previous Position**

Research Scientist  
University of Illinois at Urbana-Champaign

### **Areas of Specialization**

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.

## **CIVIL, CONSTRUCTION & ENVIRONMENTAL ENGINEERING**



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

### **Previous Position**

Assistant Professor, Construction Management Program,  
School of Engineering  
California State University East Bay

### **Areas of Specialization**

Construction engineering and management; data analytics; automation and robotics; artificial intelligence (AI); cyber-physical systems (CPS); internet-of-things (IoT); discrete-event simulation (DES); safety and productivity of construction project operations; and sustainability and resiliency of the built environment.

## **CIVIL, CONSTRUCTION & ENVIRONMENTAL ENGINEERING**



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

### **Previous Position**

Assistant Professor, Department of Civil Engineering  
Auburn University

### **Areas of Specialization**

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

## **ELECTRICAL & COMPUTER ENGINEERING**



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

### **Previous Position**

Assistant Professor, Department of Computer Science  
Texas A&M University - Corpus Christi

### **Areas of Specialization**

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.

## MECHANICAL ENGINEERING



**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.