Department of Mechanical & Aerospace Engineering
P.O. Box 116250
Gainesville, FL 32611-6250

www.mae.ufl.edu

Join the conversation

MAE BY THE NUMBERS

UNDERGRADUATE

1,887
STUDENTS

MASTER'S

426 STUDENTS — 2% GROWTH FROM 2021

DOCTORAL

151
STUDENTS

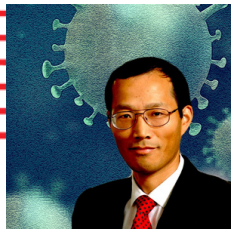
TENURE-TRACK FACULTY

54 — 6% GROWTH FROM 2021
6 NEW FACULTY & 5 OPEN POSITIONS

RESEARCH EXPENDITURES

$16.8M (ASEE $15.6M) — 4% GROWTH FROM 2021

Ranking in the Top 5 for the second year in a row, the University of Florida celebrates a major milestone of surpassing $1 billion in research expenditures. Along with the Herbert Wertheim College of Engineering, the UF Department of Mechanical and Aerospace Engineering celebrates our contribution to this achievement with our dedicated faculty and their groundbreaking research.



Dr. Z. Hugh Fan is among many MAE faculty members who are producing game-changing research findings. In an interdisiciplinary team, Dr. Fan and others have developed a reliable, affordable test that quickly differentiates COVID-19 from the seasonal flu.

NEW FACULTY

ASSISTANT PROFESSOR

JESSICA ALLEN

- Ph.D. in Mechanical Engineering, University of Texas at Austin
- Identifying biomechanical targets that can guide interventional decisions in rehabilitation and device design for individuals with ambulatory impairments.

ASSISTANT PROFESSOR

KERRY COSTELLO

- Ph.D. in Biomedical Engineering, Dalhousie University
- Understanding the role of movement biomechanics and physical activity in musculoskeletal health, with an emphasis on knee osteoarthritis.

INSTRUCTIONAL ASSOCIATE PROFESSOR

UMESH PERSAD

- PhD in Engineering Design, University of Cambridge
- Using artificial intelligence in computer aided design tools for orthopedic product design and software tools for engineering design education including blended learning, intelligent tutoring, and automated evaluation.

ASSISTANT PROFESSOR

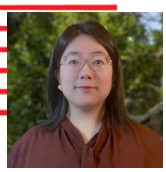
ALICIA PETERSEN

- Ph.D. in Space Physics, Engineering and Scientific Computing, University of Michigan
- Investigating space weather events and their damaging effects on spacecraft, communications, GPS, air transportation, and power systems.

ASSISTANT PROFESSOR

CHRISTOPHER PETERSEN

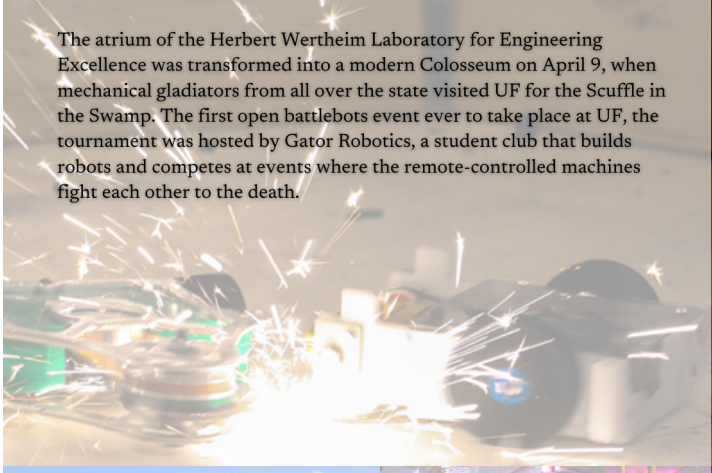
- Ph.D. in Aerospace Engineering, University of Michigan
- Exploring and exploiting spacecraft dynamics, advanced guidance, navigation, control and Autonomy (GNCA), real-time computationally aware optimization for spacecraft, particularly for trajectory design and decision making, and immersive human-satellite interfaces.



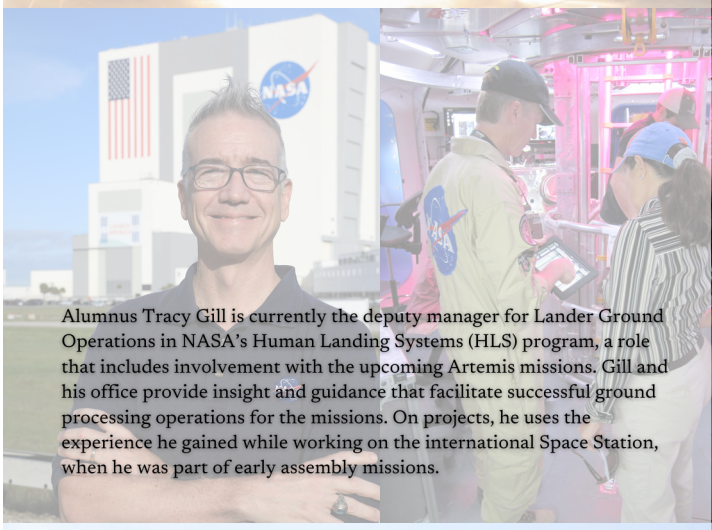
ASSISTANT PROFESSOR

JINGJING SHI

- Ph.D. in Mechanical Engineering, from Purdue University
- Understanding energy transport and conversion to solve thermal challenges in different systems, with an emphasis on wide and ultra-wide bandgap semiconductor devices for future power and radio-frequency applications.



The atrium of the Herbert Wertheim Laboratory for Engineering Excellence was transformed into a modern Colosseum on April 9, when mechanical gladiators from all over the state visited UF for the Scuffle in the Swamp. The first open battlebots event ever to take place at UF, the tournament was hosted by Gator Robotics, a student club that builds robots and competes at events where the remote-controlled machines fight each other to the death.



Alumnus Tracy Gill is currently the deputy manager for Lander Ground Operations in NASA's Human Landing Systems (HLS) program, a role that includes involvement with the upcoming Artemis missions. Gill and his office provide insight and guidance that facitilate successful ground processing operations for the missions. On projects, he uses the experience he gained while working on the international Space Station, when he was part of early assembly missions.

In a field of 60 teams at the NASA Student Launch competition, UF's competitive rocket design team, Swamp Launch, blasted its way to 4th place overall in the launch category and 3rd place for the payload design award.

The event, hosted at the Marshall Space Center in Huntsville, Alabama, is an annual contest among US universities to design, build, and fly payloads or vehicle components according to the specifications and challenges set by NASA. Its purpose is to provide resources and experience to students and faculty, who in turn produce cost-effective research that is relevant to NASA's Space Launch System.

GRANTS & AWARDS

- Thomas Angelini: ~$1,000,000 from the Advanced Regenerative Manufacturing Institute (ARMI) for Advanced Liver 3-D Tissue Models for Drug Development Applications to Support Toxicology, Drug Metabolism, Target ID, & Pharmacology
- Oana Cazacu: $1,500,000 from the U.S. Department of Defense for Simulation of Blast Energetics Performance in Hypersonic Systems
- Jonathan Scheffe: ~$2,700,000 from the U.S. Department of Energy for Solar Thermochemical Production of H2 and Solar Fuels
- John Conklin: ~$3,900,00 from NASA Goddard Space Flight Center for Simplified Gravitational Reference Sensors for Future Earth Constellations
- S.A. Sherif: ~$1,700,000 from the U.S. Department of Energy for the University of Florida Industrial Assessment Center (UF-IAC)

Photo provided by the U.S. Department of Energy