

Contact: Mary Ann Dawson

901.678.1592

mdawson@memphis.edu

 **FedEx Institute of Technology Invests in Robotics, Autonomous Vehicles and Drones Research**

January 6, 2016 - As part of the University of Memphis’ push to develop strong research competencies in robotics, autonomous vehicles and drones, the FedEx Institute of Technology has granted research awards totaling$182,000 for 13 innovative research proposals. The recipients involved include researchers from nine academic departments in five colleges and schools across the University. They include the Herff College of Engineering, the College of Arts & Sciences, Fogelman College of Business & Economics, the College of Communication and Fine Arts, and the School of Urban Affairs and Public Policy.

The awards address the challenges of application of robotics, autonomous vehicles and drones across a variety of disciplines. The projects being supported are:

• Application of Amphibious Drone Technology to Enable Environmental Monitoring and Sampling to Support Disaster Response and Drinking Water Resource Protection;

• Deep Learning Enabled Non-invasive Cognitive Interface: Where Machine Meets the Mind;

• Enhancing Human Capabilities using Unmanned Systems and Drones;

• Considering the Potential Impact of Autonomous Vehicles on Transportation Planning and Equity in Memphis;

• Secure Information Sharing among Autonomous Vehicles;

• Engineering Novel Lightweight Supercapacitor: Batteries for Ultra-Light-Vehicles;

• Restoring Damaged Metallic Parts of Robots, Autonomous Vehicles, and Drones by Additive Manufacturing;

• Investigating the impact of adopting/using drones on the bargaining power of farmers in a contract process;

• Sensor Selection for Robotic Inspection of Aircraft;

• Integrated Platforms and Algorithms of Multisensory Data Capture and Decision Support for Autonomous Vehicles;

• Drone Journalism Course Development;

• Wireless Vehicle Navigation; and

• Legal Aspects of Drone Usage

Under the program, research leaders are encouraged to collaborate with junior faculty and graduate students to help make the University the focal point for robotics, autonomous vehicles and drone research in the state of Tennessee. The research leaders will be designated as Robotics, Autonomous Vehicles and Drones Research Fellows of the FedEx Institute of Technology.

The public is invited to a kick-off event for the Robotics, Autonomous Vehicles, and Drones Research Cluster on Tuesday, Jan. 12, from 5:30 to 9 p.m. at the FedEx Institute of Technology on the University of Memphis campus. Additional information will be provided on the Cluster’s research agenda and goals. RSVP to Tammy Alexander at tlxander@memphis.edu.

 ###