

7/1/20 - 9/30/20

AWARD TITLE	AWARD AMOUNT	AWARD PI	SPONSOR	AWARD ADMIN DEPT
AirEdge: Robust Airborne Wireless Edge Computing Network using Swarming UAVs	\$333,439.00	Han, Tao	National Science Foundation (NSF)	Electrical and Computer Engineering
Analyze adsorbable fluorine contents in samples from Battelle	\$1,000.00	Sun, Mei	Battelle	Civil and Environmental Engineering
Caper Enhancement: Comparative Power Flow Analysis and Power Flow Quality Criteria - Phase 2	\$45,000.00	Cecchi, Valentina	Duke Energy Corporation	Energy Production and Infrastructure Center
CNS Core: Small: Ubiquitous Machine Vision with Adaptive Wireless Networking and Edge Computing	\$16,000.00	Han, Tao	NSF Computer and Information Science and Engineering (CISE)	Electrical and Computer Engineering
Collaborative Research: Exploiting Upper Layer Spectrum Sensing and Directionality to Access the Hidden Available Spectrum	\$220,000.00	Xie, Jiang	National Science Foundation (NSF)	Electrical and Computer Engineering
Design and Development of a Novel Parallel-Stream Counter-Rotating Darrieus Turbine System for Offshore Energy Extraction in Coastal North Carolina	\$75,561.00	Hewlin, Rodward	UNC Coastal Studies Institute (UNC-CSI)	Engineering Technology and Construction Management
Developing a Safe and Cost-effective Physics-based Flight Control Methodology for a UAV-enabled Bridge Inspection	\$23,824.00	Cavalline, Tara	North Carolina Agricultural and Technical State University (NCAT)	Engineering Technology and Construction Management
Development of a Travelling Wave Ferro-Microfluidic Device for Particle Manipulation and Sorting in Gravitational and Non-Gravitational Environments	\$20,000.00	Hewlin, Rodward	North Carolina Space Grant Consortium (NC Space Grant)	Engineering Technology and Construction Management
Engaging Future Generation War Fighters and Civilians in Research to Understand Cyber and Electronic Warfare, Cyber Defense, and Data Driven Modeling Tools	\$150,000.00	Uddin, Mesbah	DOD DN Office of Naval Research (ONR)	Mechanical Engineering and Engineering Science
Facility Management Performance Benchmarking	\$37,168.00	Smithwick, Jake	Simplar Foundation	Engineering Technology and Construction Management
Federated Architecture for Secure and Transactive Distributed Energy Resource Management Solutions (FAST-DERMS)	\$65,000.00	Chowdhury, Badrul	DOE National Renewable Energy Laboratory (NREL)	Energy Production and Infrastructure Center
FMNet: Future Manufacturing: A Network for Cybermanufacturing in Machining	\$499,999.00	Schmid, Steven	National Science Foundation (NSF)	Mechanical Engineering and Engineering Science
Generating EM Waves with Time-varying Media	\$10,000.00	Mencagli, Mario Junior	Office for Science and Technology at the Embassy of France	Electrical and Computer Engineering
GTS Flywheel Energy Storage - Business Case Analysis	\$51,274.00	Cox, Robert	Global Technical Systems	Energy Production and Infrastructure Center
Innovative Framework for Electric Power Engineering Curriculum Based on Situative Pedagogy and Data-Driven Analytical Approaches	\$179,964.00	Cecchi, Valentina	National Science Foundation (NSF)	Energy Production and Infrastructure Center
Integration of Marine Renewable Generation into Power Grid and Value Proposition Development for Economics and Resilience	\$50,044.00	Bai, Linqun	UNC Coastal Studies Institute (UNC-CSI)	Systems Engineering and Engineering Management
Intelligent Power Stages	\$50,000.00	Parkhideh, Babak	DOE Oak Ridge National Laboratories	Energy Production and Infrastructure Center
Internal wave generation from Ocean Current Turbine operation	\$53,248.00	Ramaprabhu, Praveen	UNC Coastal Studies Institute (UNC-CSI)	Mechanical Engineering and Engineering Science
Optimization of BioProcessing for Dry Preservation of GVs	\$75,500.00	Elliott, Gloria	Smithsonian Institution (SI)	Mechanical Engineering and Engineering Science
Passive samplers for per- and polyfluoroalkyl substances with innovative sorbents	\$130,820.00	Sun, Mei	DOD Strategic Environmental Research and Development Program (SERDP)	Civil and Environmental Engineering
Performance Testing of an Integrated Magnetic Power Take-Off: DoE cost share Year 2	\$18,766.00	Williams, Wesley	UNC Coastal Studies Institute (UNC-CSI)	Engineering Technology and Construction Management
Photon++ Evaluation Project	\$18,819.00	Essakiappan, Somasundaram	YVI-Labs, Inc.	Energy Production and Infrastructure Center
Process for surface finish measurement in x-ray computed tomography	\$15,958.00	Smith, Stuart	DOE Lawrence Livermore National Laboratory (LLNL)	Mechanical Engineering and Engineering Science
Recycling Options for Plastic Packaging Waste: Phase 1, Literature Review and Proof of Concept	\$18,070.00	Tempest, Brett	Sealed Air Corporation	Civil and Environmental Engineering
ROI - North Carolina Consortium for Self-Aware Machining and Metrology (CSAM)	\$287,256.00	Cherukuri, Harischandra	University of North Carolina System Office (UNC SysOff)	Mechanical Engineering and Engineering Science
Senior Design Program Fee Funding for Small and Disadvantage Business Participation	\$50,000.00	Hartman, James	North Carolina State University (NCSU)	Student Development and Success
Shaping Experiential Research for Veteran Education (SERVE)	\$96,867.00	Dahlberg, Jerry	University of Tennessee at Knoxville (UTK)	Mechanical Engineering and Engineering Science
Techno-Economic and Deployment Analysis of Fossil Fuel-Based Power Generation with Integrated Energy Storage	\$499,998.00	Sarunac, Nenad	DOE Office of Fossil Energy	Energy Production and Infrastructure Center
TO #1: Advancing Concrete Pavement Technology Solutions - Recycling and Reuse of Waste Products	\$40,000.00	Cavalline, Tara	Iowa State University (ISU)	Engineering Technology and Construction Management
Tracking SARS-CoV-2 in the Wastewater across a Range of North Carolina Municipalities	\$60,000.00	Munir, Mariya	University of North Carolina at Chapel Hill (UNC-CH)	Civil and Environmental Engineering
UNCC S-STEM: Engineering Academic Pathways	\$78,393.00	Tempest, Brett	National Science Foundation (NSF)	Civil and Environmental Engineering
Universal Power Gateway for Tactical Microgrids	\$24,300.00	Gafford, James	Hyperion Technology Group, Inc	Energy Production and Infrastructure Center
Universal Power Gateway for Tactical Microgrids	\$85,623.00	Gafford, James	Hyperion Technology Group, Inc	Energy Production and Infrastructure Center
Universal Power Gateway for Tactical Microgrids	\$74,998.00	Gafford, James	Hyperion Technology Group, Inc	Energy Production and Infrastructure Center
<b>Total</b>	<b>\$3,456,889.00</b>			