



Monthly New Awards – January 2023

Abdel-Aty, Mohamed

Optimization of Signal timing based on Pedestrian Intervals Using Computer Vision and Deep Learning Technology

Florida Department of Transportation

\$229,564

College of Engineering and Computer Science

Abou-Senna, Hatem

A Comparative Analysis of Alternative Fuel Fleet of Buses (AFB) to Enhance Mobility in Central Florida

Florida Department of Transportation

\$274,979

College of Engineering and Computer Science

Ahmed, Kareem

Ultra-High-Speed Imaging of Fuel Spray and Detonations for Naval Propulsion

Office of Naval Research

\$371,729

College of Engineering and Computer Science

Amezcuia Correa, Rodrigo | Schulzgen, Axel

Low-Loss Hollow Core Fiber Evaluation

L3Harris Technologies, Inc.

\$35,000

College of Optics and Photonics

Arboleda, Luis

Effect of Spacing on Axial Resistance of Auger Cast Pile Foundations

Florida Department of Transportation

\$265,976

College of Engineering and Computer Science

Batarseh, Issa

Highly Compact, Multi-Port, GaN-Based Grid-Forming Inverter

National Science Foundation

\$270,000

College of Engineering and Computer Science

Chambers, Lisa

Exploring the Roles of Altered Hydrology and Nutrient Regimes in Sustaining the Coastal Wetlands of Northeast Florida

Villanova University

\$50,000

College of Sciences

Chambers, Lisa

Exploring the Roles of Nutrient Regimes and Altered Hydrology in Sustaining the Coastal Wetlands of Northeast Florida

Villanova University

\$50,000

College of Sciences

Chapple, Reshawna

Rehabilitation Research and Training Center on Equity in Health and Functioning for Adults with Physical, Cognitive, Sensory and Developmental Disabilities from Marginalized Communities

The Regents of the University of Michigan

\$71,567

College of Health Professions and Sciences

Chen, Jiannan

Heartland Water Inc. Donation

Heartland Water Technology

\$2,000

College of Engineering and Computer Science

Chen, Kenle

Non-Reciprocally-Coupled Load Modulation Platform for Next-Generation High-Power Magnetic-Less Fully-Directional Radio Front Ends

National Science Foundation

\$399,577

College of Engineering and Computer Science

Chini, Jackie | Coffie, Camille | Marsh, L. Trenton

Journey to a PhD Through the Lens of Black Women in Physics

American Physical Society

\$198,100

College of Sciences

Choi, Eunice

Small Business Development Center, University of Central Florida

University of West Florida

\$217,943

Small Business Development Center

Choi, Hwan | Zhu, Xiang

Collaborative Research: Bioinspired High Energy Recycling Mechanism Ankle Foot Prosthesis

National Science Foundation

\$315,578

College of Engineering and Computer Science

Davis, Kristopher

Accelerating Cycles of Learning of Advanced Silicon Architectures

Case Western Reserve University

\$83,928

College of Engineering and Computer Science

Divliansky, Ivan

Innovative Solutions for Laser Weapon Components, Devices, and Subsystems

Olkin Optics, LLC

\$29,983

College of Optics and Photonics

Duranceau, Steve

Water, Wastewater & Reclaimed Water Infrastructure Research Assistance

City of Sarasota

\$51,531

College of Engineering and Computer Science

Duranceau, Steve

Hollow Fiber Nanofiltration Bench-Scale Evaluation

City of Sarasota

\$9,250

College of Engineering and Computer Science

Eluru, Naveen

2022 Dwight David Eisenhower Transportation Fellowship Program

U.S. Department of Transportation/Federal Highway Administration

\$5,000

College of Engineering and Computer Science

Eriksson, Gillian | Hines, Rebecca

Gifted Learning Infusing Marginalized Perspectives via Strengths Education

The School District of Osceola County

\$892,051

College of Community Innovation and Education

Hahs-Vaughn, Debbie

Personalized Adaptive Learning in Undergraduate Mathematics: A Meta-Analysis

National Science Foundation

\$300,000

College of Community Innovation and Education

Ingraham, Kate

Simulation Labs for ESL Methods

Idaho State University

\$1,885

College of Community Innovation and Education

Kapat, Jayanta | Raghavan, Seetha | Vesely, Ladislav

Development of Novel Mesoporous Substrates for a Stable Liquid-Metal Plasma-Material Interface Under Ultra Long-Plasmas

Energy Driven Technologies, LLC

\$184,024

College of Engineering and Computer Science

Kaufman, Joshua

Photonics Support

Critical Frequency Design, LLC

\$44,119

College of Optics and Photonics

Kent-Walsh, Jennifer

FAAST Regional Demonstration Center Expanding the Public Health Workforce Contract
Florida Alliance for Assistive Services and Technology, Inc.

\$11,342

College of Health Professions and Sciences

Kettles, Colleen

Pathways to Career Opportunities Grant Program TAPS 23B019

Florida Department of Education

\$269,375

Florida Solar Energy Center

Kettles, Colleen

Equitable Mobility Powering Opportunities for Workplace Electrification Readiness
East Tennessee Clean Fuels Coalition

\$73,000

Florida Solar Energy Center

Khondaker, Saiful

Registration Fees for 2023 Science and Technology of Emerging Materials Symposium

Various

\$1

NanoScience Technology Center

Kirkegard, Belinda

Orange County, Florida and University of Central Florida Research Foundation, Inc. FY 2022-23
Grant Agreement
Orange County Board of County Commissioners
\$230,000
National Entrepreneurial Center

Kushima, Akihiro

First Principles Analysis of the Ti Doping Effect on the Performance of a Spinel-Like Disordered
Rocksalt Cathode
Honda R&D Co LTD
\$27,631
College of Engineering and Computer Science

Lee, Woo Hyoung

Hydrothermal Gasification of Concentrated Black Water to Produce Energy and Low Tier Water
Mainstream Engineering Corporation
\$140,000
College of Engineering and Computer Science

Logue, CarolAnn Dykes

Tech Grove Donation Account
Various
\$1
Research Development

Marshall, Sean

Applying Bayesian Optimization to Thermophysical Modeling of Asteroids
NASA Shared Services Center
\$37,998
Florida Space Institute

McClellan, Tammie

IT Support for Florida Center for Nursing
University of South Florida
\$36,541
School of Modeling, Simulation, and Training

Parks, Griffith

Complement Resistance Acquired During Acute to Persistent Rubulavirus Infection
National Institute of Allergy and Infectious Diseases
\$241,169
College of Medicine

Polera, Christopher

Reprogramming Pancreatic Tumors via FUBP1 Inhibition
Cayman Biomedical Research Institute

\$5,000
College of Medicine

Reiners, Dirk

Real-Time and Cloud-Based Simulations for XR Digital Twin Environments
Buendea, LLC
\$65,700
School of Modeling, Simulation, and Training

Renshaw, Kyle

OCDC Follow-On
Exciting Technology, LLC
\$27,783
College of Optics and Photonics

Saitta, Erin | Chini, Jackie

Investigating Video-Based Graduate Teaching Assistant Professional Development to Support
Universal Design for Learning in Undergraduate Chemistry Courses
National Science Foundation
\$493,840
College of Sciences

Shtrom, Svetlana

Technology Acceleration Program--Venture Launch
Orange County Board of County Commissioners
\$200,000
Technology Transfer

Sohn, Yongho

Study on Fracture Resistance Mechanism of HB500 Grade High Hardness and High Toughness
Steel Welds
POSCO
\$49,663
College of Engineering and Computer Science

Solihin, Yan

Addressing Cross-PMO and Data-at-Rest Vulnerabilities in Persistent Memory
Office of Naval Research
\$20,000
College of Engineering and Computer Science

Vasu Sumathi, Subith

Investigation of Ammonia for Combustion Turbines
GTI Energy
\$351,735
College of Engineering and Computer Science

Vasu Sumathi, Subith

Ultra High-Speed Imaging System for Hypersonics Research and Education Training
U.S. Air Force Office of Scientific Research
\$257,710
College of Engineering and Computer Science

Vasu Sumathi, Subith

Improved Hypersonic Jet Interaction Modeling with Propulsion Exhaust
Combustion Research and Flow Technology, Inc.
\$39,000
College of Engineering and Computer Science

Villalba, Karina

Technology-Based Assessments and Intervention to Reduce Alcohol Consumption and Improve
HIV Viral Suppression in the Florida Cohort
University of Florida
\$46,292
College of Medicine

Vodopyanov, Konstantin

Optical Materials for Ultrahigh-Power Long-Wave Infrared Lasers
Brookhaven Science Associates, LLC
\$41,924
College of Optics and Photonics

Welch, Gregory | Bruder, Gerd

SAP Trust Phase II: Trust in AR AFWERX Phase II
Vision Products LLC
\$299,318
College of Nursing

Wolf, Ross

US-DOJ ICITAP Tourism Oriented Policing Program
PAE Government Services, Inc.
\$80,653
College of Community Innovation and Education

Wu, Shintson

VR Lens Device and Optics
Apple, Inc.
\$65,000
College of Optics and Photonics

Xia, Xiaohu

A Sensitive Lateral Flow Assay for Point-of-Care Testing of Emerging Zoonotic Diseases

Research Corporation for Science Advancement
\$55,000
College of Sciences