

1/8/2021	Proposals						
Submit Date	PI Name	Dept	Project Title	Agency	Total	Proposed Start Date	Proposed End Date
12/22/2020	Nambisan, Shashi	Transportation Research Center	Feasibility of Implementing Pedestrian Hybrid Beacons to Improve Safety and Mobility in Nevada	Nevada Department of Transportation	298,983	5/16/2021	5/15/2024
12/22/2020	Nambisan, Shashi	Transportation Research Center	Investigating Implementation Potential of Turbo Roundabouts in Nevada	Nevada Department of Transportation	249,813	5/16/2021	5/15/2024
12/21/2020	Venkat, Rama	Dean, College of Engineering	UNLV- TBE Payload Development	Teledyne Brown Engineering, Inc-FPT	20,192	8/3/2015	3/31/2021
	Co-PI Nasoz, Fatma	Computer Science					
	Co-PI Watkins, Helga	Dean, College of Fine Arts					
12/30/2020	Park, Jee Woong	Civil & Envirnmntl Eng & Const	Development of a Precision Positioning & Alerting System for Worker Safety	Zonetap, Inc-FPT	82,195	4/1/2021	10/1/2021
12/30/2020	Stephen, Haroon	Civil & Envirnmntl Eng & Const	Planning Project: Amplifying Climate Resilience Curriculum Using Informal Learning Opportunities for Undergraduates	Nevada State College-FPT	58,915	8/15/2021	8/14/2023
12/14/2020	Zhai, Shengjie	Mechanical Engineering	Collaborative Research: Scalable Nanoparticle Assembly at Liquid-air Interfaces Directed by the Electric Field and Spin Coating	National Science Foundation	478,969	9/1/2021	8/31/2024
	Co-PI Zhao, Hui	Mechanical Engineering					
12/14/2020	Singh, Sahjendra	Elec & Comp Engineering	Integrated Path Planning and Adaptive Flight Control of UAVs	Office of Naval Research	496,848	5/1/2021	5/31/2024
	Co-PI Gewali, Laxmi	Computer Science					
12/17/2020	Barzilov, Alexander	Mechanical Engineering	Development of a Fully Autonomous System of Multi-use Mobile Robots with Plug-and-play Components and 3D Software for D&D Tasks in Radioactive Environments	Savannah River Nuclear Solutions, LLC - FPT	300,000	2/15/2021	2/14/2022
	Co-PI Yim, Woosoon	Mechanical Engineering					
	Co-PI Muthukumar, Venkatesan	Elec & Comp Engineering					
12/17/2020	Barzilov, Alexander	Mechanical Engineering	Remotely Monitored Storage Tank Active Barrier to Capture Potential Releases of Chromium, Cesium and Strontium	Savannah River Nuclear Solutions, LLC - FPT	300,000	2/15/2021	1/14/2022
	Co-PI Batista, Jacimaria	Civil & Envirnmntl Eng & Const					
	Co-PI Moon , Jaeyun	Mechanical Engineering					
12/21/2020	Barzilov, Alexander	Mechanical Engineering	Multi-Modal, Multi-Energy Approach for Neutron Interrogation of Spent Fuel - Task 47	Mission Support and Test Services, LLC	44,945	12/21/2020	9/30/2021
12/22/2020	Ghafoori, Nader	Civil & Envirnmntl Eng & Const	Evaluation of Corrosion-Resistant Reinforcements for Pavements and Bridges	Concrete Reinforcing Steel Inst Research & Edu Foundation	30,000	9/1/2021	8/31/2022
10/9/2020	Baker, R. Jacob	Elec & Comp Engineering	Cryo-CMOS Integrated Circuits A2B-T005	Freedom Photonics LLC/FPT	45,971	12/1/2020	7/1/2021
10/9/2020	Baker, R. Jacob	Elec & Comp Engineering	Integrated Circuits for Gamma Detector Read Out and/or Gamma Spectral Signal Analysis DTRA20B-002	Freedom Photonics LLC/FPT	50,905	12/1/2020	7/1/2021
10/9/2020	Baker, R. Jacob	Elec & Comp Engineering	Radiation-Resistant and Temperature-Insensitive Solid State Photomultipliers DTRA202-006	Freedom Photonics LLC/FPT	49,347	12/1/2020	7/1/2021
10/13/2020	Baker, R. Jacob	Elec & Comp Engineering	SBIR Phase I Topic: DOE SBIR 36.B SiGe BiCMOS Current-Mode Photon Counting Front-End ASIC	Freedom Photonics LLC/FPT	42,261	2/1/2021	10/1/2021
10/16/2020	Khan, Eakalak	Civil & Envirnmntl Eng & Const	Resource Extraction and Recovery for Life Support on Mars	EPSCoR/National Aeronautics & Space Administration	293,619	6/1/2021	5/31/2024
10/16/2020	Yim, Woosoon	Mechanical Engineering	Nanotechnology-enabled Sensor Development for the Mars Drone to Perform Dust Emission Studies	EPSCoR/National Aeronautics & Space Administration	312,273	6/1/2021	5/31/2024
10/16/2020	Kim, Kwang	Mechanical Engineering	Preventing Biofilm Formation in Space	EPSCoR/National Aeronautics & Space Administration	243,538	8/1/2021	7/31/2024
10/16/2020	Stephen, Haroon	Civil & Envirnmntl Eng & Const	NASA EPSCoR: Remote Sensing of Wildfires	EPSCoR/National Aeronautics & Space Administration	179,286	6/1/2021	5/31/2022
10/13/2020	Zhao, Hui	Mechanical Engineering	Durable Self-cleaning Fluorinated Graphene Oxide Coated N95 Respirators	Centers for Disease Control	367,092	7/1/2021	6/30/2023
10/23/2020	Teng, Hualiang	Civil & Envirnmntl Eng & Const	Tier 1 University Transportation Center on Rail Infrastructure (RailTeam)	U.S. Department of Transportation	1,427,900	12/6/2016	9/30/2022
11/1/2020	Cho, Han-Jae (Jeremy)	Mechanical Engineering	Osmotic longel Condensers for Spacecraft Humidity Control and Water Recapture - Negin Garakani	National Aeronautics and Space Administration	320,000	8/2/2021	8/1/2025
10/27/2020	Zhao, Hui	Mechanical Engineering	Anomalous Electric-field Induced Collective Dynamics of Colloids	National Science Foundation	418,641	9/1/2021	8/31/2024
11/4/2020	O'Toole, Brendan	Ctr for Materials & Structures	A Feasibility Study of Concepts for Accelerating a 2 mm Diameter Aluminum Sphere to a Velocity of 30 km/sec.	Lockheed Martin Corporation-FPT	21,615	11/16/2020	2/26/2021
	Co-PI Trabia, Mohamed	Mechanical Engineering					
11/24/2020	Kim, Kwang	Mechanical Engineering	An Adaptive Actuation Strategy for Soft Robotic Exoskeletons	ExoForce Robotics Inc	76,800	7/1/2021	6/30/2022
11/10/2020	Stefik, Andy	Computer Science	Collaborative Research: HCC: Medium: Creating a Data Science Platform for an Inclusive Pipeline in the Empirical Science	National Science Foundation	628,976	10/1/2021	9/30/2024
11/12/2020	Barzilov, Alexander	Mechanical Engineering	14-MeV Neutron Facility for Research and Education at UNLV	U.S. Department of Energy	234,000	8/1/2021	7/31/2022

Co-PI	Gelis, Artem	Chemistry & Biochemistry					
11/24/2020	Kang, Mingon	Computer Science	AI Institute: Artificial Intelligence Institute for Animal Health and Food Safety (AI4AF)	University of Arkansas	299,208	8/1/2021	7/31/2026
11/13/2020	Kim, Yoohwan	Computer Science	Orchestrated Distributed Energy Resource Security Agent (ODERSA)	Electric Power Research Institute-FPT	148,740	1/1/2021	12/31/2023
11/2/2020	Venkat, Rama	Dean, College of Engineering	UNLV- TBE Payload Development	Teledyne Brown Engineering, Inc-FPT	28,779	8/3/2015	3/31/2021
Co-PI	Nasoz, Fatma	Computer Science					
Co-PI	Watkins, Helga	Dean, College of Fine Arts					
11/5/2020	Venkat, Rama	Dean, College of Engineering	UNLV- TBE Payload Development	Teledyne Brown Engineering, Inc-FPT	27,225	8/3/2015	3/31/2021
Co-PI	Nasoz, Fatma	Computer Science					
Co-PI	Watkins, Helga	Dean, College of Fine Arts					
11/4/2020	Muthukumar, Venkatesan	Elec & Comp Engineering	Entrepreneurship and Small Business Startup Program for Graduate Students	National Science Foundation	498,730	5/1/2021	4/30/2024
Co-PI	Baghzouz, Yahia	Elec & Comp Engineering					
Co-PI	Regentova, Emma	Elec & Comp Engineering					
11/4/2020	Yang, Mei	Elec & Comp Engineering	Engaging Underrepresented Minority and Female Students in Engineering Graduate Programs through Career Capital Pipeline	National Science Foundation	493,882	6/1/2021	5/31/2024
Co-PI	Morris, Brendan	Elec & Comp Engineering					
Co-PI	Xing, Xue	Teaching and Learning					
12/4/2020	Schill, Robert	Ctr Eng Matrls Tech (EMITION)	Investigate Redirection Phenomena - Mapping Current Redirection in the MSTs DPF - Task 46	Mission Support and Test Services, LLC	49,999	12/15/2020	9/2/2021
12/7/2020	Oh, Paul	Mechanical Engineering	AI Institute: Artificial Intelligence in Transportation-Autonomous Infrastructure Networks	Missouri University of Science and Technology	1,342,695	8/15/2021	8/14/2025
Co-PI	Morris, Brendan	Elec & Comp Engineering					
12/9/2020	Khan, Eakalak	Civil & Envirnmntl Eng & Const	Development of an Immobilized Bacterial Cell Biosensor for Monitoring of Trichloroethene in Groundwater	Savannah River Nuclear Solutions, LLC - FPT	253,667	6/1/2021	5/31/2022
12/9/2020	Kim, Kwang	Mechanical Engineering	Soft-Robots Housing Flexible Inspection Sensors	Savannah River Nuclear Solutions, LLC - FPT	197,502	3/1/2021	2/28/2022
12/15/2020	Zhai, Shengjie	Mechanical Engineering	Thiol-functionalized Silk Fibroin Sorbents to Effectively Remove Organo-mercury from Strongly Alkaline Solutions with Long-term Sequestration	Savannah River Nuclear Solutions, LLC - FPT	297,261	2/1/2021	1/31/2022
Co-PI	Zhao, Hui	Mechanical Engineering					
Co-PI	Huang, Shichun	Geoscience					
12/15/2020	Marti, Erica	Civil & Envirnmntl Eng & Const	Alternative DOE Tank Waste Processing: Phosphate Encapsulation of Radionuclides using a Waste Product from Wastewater Treatment	Savannah River Nuclear Solutions, LLC - FPT	272,780	2/1/2021	1/31/2022
Co-PI	Czerwinski, Kenneth	Chemistry & Biochemistry					
Co-PI	Koury, Daniel	Chemistry & Biochemistry					
12/9/2020	Jiang, Yingtao	Elec & Comp Engineering	A UAV-based Methane Leakage Detection System Built Upon Multispectral Imagery and AI-powered Analytics Enhanced with Atmospheric Correction	Savannah River Nuclear Solutions, LLC - FPT	299,974	2/1/2021	1/31/2022
Co-PI	Zhai, Shengjie	Mechanical Engineering					
Co-PI	Zhu, Ming	Elec & Comp Engineering					
12/9/2020	Moon, Jaeyun	Mechanical Engineering	Green and Cost-effective Remediation of Organic Contaminants in Subsurface Environments: Ex-situ Pilot-scale Testing with Enhanced and Massively-produced Biochar	Savannah River Nuclear Solutions, LLC - FPT	270,693	2/1/2021	1/31/2022
Co-PI	Marti, Erica	Civil & Envirnmntl Eng & Const					
12/1/2020	Kang, Mingon	Computer Science	Integrative Multi-omics Analysis of Sexual Dimorphism using a Deep Learning Model	Cincinnati Children's Hospital Medical Center-FPT	980,394	7/1/2021	6/30/2026
11/11/2020	Park, Jee Woong	Civil & Envirnmntl Eng & Const	Development of a Low-Cost, Sub-Meter Positioning & Alerting Wearable for the Mass Market	Zonetap, Inc-FPT	81,756	2/1/2021	1/31/2022
EGR	43				Total	12,616,369	
12/28/2020	Lehmann, Steffen	Architecture, School of	HEAT-SIM: A Regional Approach to Equitable Heat Mitigation and Resilience across the Desert Southwest	Arizona State University	2,200,000	9/1/2021	8/31/2026
Co-PI	Ahmad, Sajjad	Civil & Envirnmntl Eng & Const					
Co-PI	Sah, Vivek	Lied Inst Real Estate Studies					
11/24/2020	Bernhard, Bo	Office of Economic Development	NSF-Icorps Hub: Multiple Regions Spanning from East to West	Arizona State University	453,923	1/1/2021	12/31/2026
Co-PI	Trabia, Mohamed	Dean, College of Engineering					
10/15/2020	Tsourkas, Philippos	School of Life Sciences	A Machine Learning Tool for Rapid and Accurate Bacteriophage Genome Annotation	National Institutes of Health	373,750	2/25/2021	2/24/2024
Co-PI	Harris, Sarah	Elec & Comp Engineering					
12/4/2020	Nicholl, Michael	Geoscience	In Situ Remediation of the Deep Vadose Zone with Nano Zerovalent Iron: Transport, Isotopic Fractionation and Comparison to Biotic Reduction	Savannah River Nuclear Solutions, LLC - FPT	299,786	2/1/2021	1/31/2022
Co-PI	Batista, Jacimaria	Civil & Envirnmntl Eng & Const					
Co-PI	Huang, Shichun	Geoscience					