Fiscal Year 2023 DEPSCoR Winners			
Institution of Higher Education (IHE)	**IHE Location**	**Principal Investigator**	**Project Title**
Auburn University	AL	Sharan, Nek	Dynamic Loads and Flow Structures on a Hovering Rotor Blade Above Inclined Ground
University of Alabama in Huntsville	AL	Nelson, George	Assessment of Battery Degradation Pathways with Multiscale Multimodal Imaging and Impedance Techniques
Arizona State University	AZ	Ahmad, Adil	A New Paradigm in Log Collection: Systematic, Fine-Grained, Low-TCB, and Efficient
Arizona State University	AZ	Gopalan, Nakul	Task Interpretation and Planning for Robots Through Autonomous Language Driven Curriculum
Arizona State University	AZ	Hasan, Rakibul	Dynamic and Personalized Deception for Proactive Cyber Defense
University of Arizona	AZ	Yurkiv, Vitaliy	Machine Learning-Assisted Forecasting of Thermal Events in Rechargeable Batteries
Yale University	CT	Wright, Logan	Physical Design Decomposition for Inverse Design of Large-Scale Linear and Nonlinear Electromagnetic Devices
Iowa State University	IA	GS, Sidharth	Baroclinic and Dilatational Effects in Highly Compressible Reactive Flows
University of iowa	IA	Uppu, Ravitej	Robust Generation and Transfer of Multiphoton States Using Reduced-Symmetry Quantum Photonics
Boise State University	ID	Meister, Konrad	Unraveling the Molecular Basis for Superior Ice Nucleation Activity
Purdue University	IN	Aggarwal, Vaneet	Reinforcement Learning for Adaptive Single Photon Imaging in the Sub-Rayleigh Region Through Atmospheric Turbulence
Purdue University	IN	Honnappa, Harsha	Robust Stochastic Filtering for Shot Noise and Levy Noise Driven Systems
Purdue University	IN	Qureshi, Ahmed	Compositional Learning from an Imperfect Primitive Skill Sets for Solving Complex Tasks
Louisiana State University	LA	Massatt, Daniel	Incommensurate Multi-Walled Nanotubes: Electronic and Mechanical Properties
Lousiana Tech University	LA	Ramachandran, Bala	Basic Research into Next Generation Nitride-Based Thin Films to Enable Domestic Manufacturing of Microelectronics for Harsh Environments
University of Minnesota, Twin Cities	MN	Simeni Simeni, Marien	Probing the Ablation of Hypersonic Vehicle Heat Shield Materials Using Pulsed Lasers and Advanced Spectroscopic Diagnostics
Missouri University of Science and Technology	MO	Liang, Zhi	Understanding Dynamics and Evaporation of Fuel Droplets in Supercritical Environments via Multiscale Modeling and Experiments
University of Missouri-Columbia	MO	Brorsen, Kurt	Theoretical and Experimental Investigations of Gas-Phase Molecular Polaritons
Mississippi State University	MS	Narsipur, Shreyas	Experimental and Computational Investigation of Propeller-Wing Aerodynamics During Transitional Flight Mode
Montana State University	MT	Morris, Sarah	Vortex-Surface Interactions in Unsteady and Gusting Environments
University of New Mexico	NM	Syed, Mubarak Hussain	Building Intelligent Systems Using Fruit Fly Navigational Neural Networks
University of Tulsa	OK	Gamble, Rose	Capacity Building to Enhance the Understanding of Process, Structure, and Property Relationships of Ultra-High Temperature Materials for Extreme Environments
Brown University	RI	Caretta, Lucas	Evaluating and Fingerprinting Spintronic Materials Performance Using a Single Spin Sensor
University of South Carolina	SC	Narayanan, Vignesh	Learning-Enabled Collaborative Autonomy for Networked CPS
University of Wisconsin-Madison	WI	Hu, Jiamian	An Experimentally Validated Predictive Simulation Framework for III-Nitride HEMTs at > 94 GHz Operation
University of Wisconsin-Madison	WI	Kazyak, Eric	Operando Visualization and Modeling of Dynamic Heterogeneity and Coupled Phenomena in Intercalation Electrodes
West Virginia University	WV	Gritsenko, Valeriya	Multimodal Framework for Sensation to Action Transformation