

| 10/9/2020   | Proposals                    |                                |  |  |           |                     |                   |
|-------------|------------------------------|--------------------------------|--|--|-----------|---------------------|-------------------|
| Submit Date | PI Name                      | Dept                           | Project Title  | Agency   | Total     | Proposed Start Date | Proposed End Date |
| 7/1/2020    | Breen, Erin                  | Transportation Research Center | Vulnerable Road Users Project  | Nevada Office of Traffic Safety                              | 125,000   | 7/1/2018            | 6/30/2021         |
| 7/8/2020    | Kim, Yoohwan                 | Computer Science               | Distributed Secure Communications in Intra-Vehicle Networks  | Optimal Synthesis, Inc                                       | 55,000    | 1/1/2021            | 6/30/2021         |
|             | Co-PI Jo, Ju-Yeon            | Computer Science               |  |  |           |                     |                   |
| 7/22/2020   | Khan, Eakalak                | Civil & Envirnmntl Eng & Const | Screening, Identification and Development of Task Specific Acidic Ionic Liquids for the Dissolution and Recovery of Metals and Silica from Regolith                  | National Aeronautics and Space Administration                | 145,580   | 9/1/2020            | 8/31/2021         |
| 7/16/2020   | Khan, Eakalak                | Civil & Envirnmntl Eng & Const | Development and Testing of a Deep-Eutectic Solvent Coated Graphitic Biochar Adsorbent for Treating Dimethyl Sulfone in Wastewater on the International Space Station | National Aeronautics and Space Administration                | 94,084    | 9/1/2020            | 8/31/2021         |
| 7/13/2020   | Barzilov, Alexander          | Mechanical Engineering         | Nuclear Science and Engineering Consortium for Nonproliferation (NSECN)  | Purdue University  | 1,499,994 | 7/12/2021           | 7/11/2026         |
|             | Co-PI Gelis, Artem           | Chemistry & Biochemistry       |  |  |           |                     |                   |
| 7/23/2020   | Shrestha, Pramen             | Transportation Research Center | Evaluation Framework for Fare-Free Public Transportation   | National Academy of Sciences                                 | 99,851    | 11/1/2020           | 4/30/2022         |
| 7/15/2020   | James, David                 | Civil & Envirnmntl Eng & Const | Las Virgenes Reservoir Tracer Study  | Las Virgenes Municipal Water District                        | 501,251   | 10/1/2020           | 3/1/2022          |
|             | Co-PI Saber Sichani, Ali     | Civil & Envirnmntl Eng & Const |  |  |           |                     |                   |
| 7/28/2020   | Kang, Mingon                 | Computer Science               | Novel Integrative Analysis of Multi-omics Data Using Biologically Interpretable Deep Learning  | Cincinnati Children's Hospital Medical Center-FPT            | 980,394   | 4/1/2021            | 3/31/2026         |
| 7/28/2020   | Zhao, Hui                    | Mechanical Engineering         | COVID: CRISPR-on-Paper: A Programmable Platform for Multiplexed Detection of SARS-CoV-2 and Associated Respiratory Pathogens?  | University of Connecticut Health Center                      | 74,081    | 10/1/2020           | 9/30/2025         |
| 7/29/2020   | Park, Jee Woong              | Civil & Envirnmntl Eng & Const | RII Track-4: Human-augmented Technology Interaction to Overcome the Visual and Mental Impediments of Construction Workers and Engineers                              | National Science Foundation                                  | 176,153   | 2/1/2021            | 1/31/2023         |
| 7/30/2020   | Jo, Ju-Yeon                  | Computer Science               | Establishing CyberCorps Scholarship for Service Program at University of Nevada, Las Vegas   | National Science Foundation                                  | 2,236,668 | 7/1/2021            | 6/30/2026         |
|             | Co-PI Kim, Yoohwan           | Computer Science               |  |  |           |                     |                   |
| 7/24/2020   | Kim, Si Jung                 | Dean, College of Engineering   | Investigation of Show Production Procedures and Characteristics  | Korea Institute of Industrial Technology                     | 65,000    | 6/1/2019            | 12/31/2020        |
| 8/5/2020    | Boehm, Robert                | Center for Energy Research     | Technical Support and Maintenance of the NV Regional Test Center for Solar Technologies  | Sandia National Laboratories                                 | 75,222    | 4/27/2020           | 9/30/2021         |
| 8/5/2020    | O'Toole, Brendan             | Ctr for Materials & Structures | SRII Corporate Match - Rebel Roof Rack   | Mojave Rail Fabrication, Ltd                                 | 100,000   | 9/1/2020            | 8/31/2021         |
| 8/4/2020    | Baghzouz, Yahia              | Center for Energy Research     | Magnetic Shaft Coupling for Dish CSP - sCO2 Power Generation System  | U.S. Department of Energy                                    | 263,358   | 1/1/2021            | 12/31/2021        |
|             | Co-PI Boehm, Robert          | Center for Energy Research     |  |  |           |                     |                   |
| 8/5/2020    | Choi, Jin Ouk                | Civil & Envirnmntl Eng & Const | CAREER: Digital Twin of Modular House Fabrication & Smart Factory Automation with Robotic Arms   | National Science Foundation                                  | 500,000   | 1/1/2021            | 12/31/2025        |
| 8/6/2020    | Park, Jee Woong              | Civil & Envirnmntl Eng & Const | CAREER: Adaptive Platform of Success Factor Identification for Future Smart Systems through Harnessed Data   | National Science Foundation                                  | 501,854   | 7/1/2021            | 6/30/2026         |
| 8/6/2020    | Choi, Jin Ouk                | Civil & Envirnmntl Eng & Const | Investigation of Module-Core Joint Method for Modular Construction   | Korea Institute of Civil Engineering and Building Technology | 25,000    | 3/1/2020            | 12/31/2020        |
| 8/6/2020    | Park, Jee Woong              | Civil & Envirnmntl Eng & Const | Active Scaffolding Monitoring Using Emerging Automation Technology   | PERI GmbH  | 339,894   | 7/1/2020            | 12/31/2022        |
| 8/11/2020   | Bansal, Shubhra              | Center for Energy Research     | CAREER: Air Stable and Tunable Bandgap Pb-free Halide Perovskite Materials for Photovoltaic and Photocatalytic Applications  | National Science Foundation                                  | 562,529   | 8/1/2021            | 7/31/2026         |
| 8/20/2020   | Boehm, Robert                | Center for Energy Research     | The Solar Energy-Water-Environment Nexus in Nevada - Task 5 - Workforce Development/Education  | EPSCoR/National Science Foundation                           | 40,640    | 9/11/2017           | 5/31/2021         |
|             | Co-PI Batista, Jacimaria     | Civil & Envirnmntl Eng & Const |  |  |           |                     |                   |
| 8/12/2020   | Stefik, Andy                 | Computer Science               | Collaborative Research: DTI: Toward Data Science For All   | National Science Foundation                                  | 695,012   | 6/1/2021            | 5/31/2025         |
| 8/31/2020   | Park, Jee Woong              | Transportation Research Center | AI Analyzer for Revealing Insights of Traffic Crashes  | The National Academies of Sciences Engineering Medicine      | 82,899    | 2/1/2021            | 1/31/2022         |
| 8/31/2020   | Nambisan, Shashi             | Transportation Research Center | Integrated Safety Technology Corridor for US DOT ATCMTD Initiative   | Regional Transportation Commission of So. Nevada             | 955,499   | 7/1/2021            | 6/30/2025         |
|             | Co-PI Muthukumar, Venkatesan | Elec & Comp Engineering        |  |  |           |                     |                   |
|             | Co-PI Morris, Brendan        | Elec & Comp Engineering        |  |  |           |                     |                   |
| 8/31/2020   | Taghva, Kazem                | Computer Science               | RII Track I: Harnessing the Data Revolution for Fire Science   | EPSCoR/National Science Foundation                           | 4,276,832 | 7/1/2021            | 6/30/2026         |
| 9/3/2020    | Stefik, Andy                 | Computer Science               | Collaborative Research: AccessCS for All: Including Students with Disabilities in at High School Computer Science  | National Science Foundation                                  | 83,506    | 9/1/2017            | 8/31/2021         |
| 9/18/2020   | Zhao, Hui                    | Mechanical Engineering         | CRISPR-on-Paper: A Programmable Platform for Multiplexed Detection of SARS-CoV-2 and Associated Respiratory Pathogens  | University of Connecticut-FPT                                | 77,522    | 7/1/2021            | 6/30/2026         |

|            |                        |                                    |  |  |                   |           |            |
|------------|------------------------|------------------------------------|--|--|-------------------|-----------|------------|
| 9/18/2020  | Morris, Brendan        | Elec & Comp Engineering            | Monitoring of Tissue Perfusion in Surgery Through the Combined Use of Thermal, RGB and LIDAR Cameras                                 | Sony   | 99,765            | 7/1/2021  | 6/30/2022  |
|            | Co-PI Menezes, John    | Plastic Surgery                    |  |  |                   |           |            |
| 9/22/2020  | James, David           | Civil & Envirnmntl Eng & Const     | Application of Advanced Signal Processing Techniques to Simulate Suspended Solids Emission Rates Associated with Dredging Activities | U.S. Army Research Engineer and Development Center | 30,000            | 9/22/2020 | 1/22/2021  |
| 7/28/2020  | Muthukumar, Venkatesan | Elec & Comp Engineering            | ICS-SCADA Security Workshop - Part II Schedule - Task 43   | Mission Support and Test Services, LLC             | 25,621            | 9/23/2020 | 9/30/2021  |
| 9/27/2020  | Khan, Eakalak          | Civil & Envirnmntl Eng & Const     | Sustainable Water Resource Management Using Membrane Distillation Coupled with Waste Heat Power for Oil/Water Production Systems     | University of Houston-FPT                          | 898,384           | 6/1/2021  | 5/31/2024  |
| 9/28/2020  | Kim, Yoohwan           | Computer Science                   | ICS-SCADA Security Workshop - Part I Schedule - Task 43  | Mission Support and Test Services, LLC             | 24,637            | 9/23/2020 | 9/30/2021  |
| 9/1/2020   | Venkat, Rama           | Dean, College of Engineering       | UNLV- TBE Payload Development  | Teledyne Brown Engineering, Inc-FPT                | 16,625            | 8/3/2015  | 9/30/2020  |
|            | Co-PI Nasoz, Fatma     | Computer Science                   |  |  |                   |           |            |
|            | Co-PI Watkins, Helga   | Dean, College of Fine Arts         |  |  |                   |           |            |
| 7/1/2020   | Baker, R. Jacob        | Elec & Comp Engineering            | Cryo-CMOS Integrated Circuits A2B-T005   | Freedom Photonics LLC/FPT                          | 45,971            | 12/1/2020 | 7/1/2021   |
| 7/1/2020   | 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   |
| 7/1/2020   | 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   |
| <b>EGR</b> | <b>36</b>              |                                    |  | <b>Total</b>                                       | <b>15,874,078</b> |           |            |
|            |                        |                                    |  |  |                   |           |            |
| 8/26/2020  | Hardin, Andrew         | Troesch Ctr Epren & Innovation     | I-Corps Sites: Type II: UNLV Lean Entrepreneurship Advancement Program (LEAP)  | National Science Foundation                        | 79,999            | 1/1/2019  | 12/31/2022 |
|            | Co-PI O'Toole, Brendan | <b>Mechanical Engineering</b>      |  |  |                   |           |            |
|            | Co-PI Kachroo, Pushkin | <b>Elec &amp; Comp Engineering</b> |  |  |                   |           |            |
|            | Co-PI Martin, Leith    | Mgmt, Entrepreneurship & Tech      |  |  |                   |           |            |
| 9/1/2020   | Hardin, Andrew         | Troesch Ctr Epren & Innovation     | Type II: UNLV Lean Entrepreneurship Advancement Program (LEAP)   | National Science Foundation                        | 79,999            | 1/1/2019  | 12/31/2022 |
|            | Co-PI O'Toole, Brendan | <b>Mechanical Engineering</b>      |  |  |                   |           |            |
|            | Co-PI Kachroo, Pushkin | <b>Elec &amp; Comp Engineering</b> |  |  |                   |           |            |
|            | Co-PI Martin, Leith    | Mgmt, Entrepreneurship & Tech      |  |  |                   |           |            |