

| UTC Project Information – Project 1.22 | |
|---|---|
| Project Title | Machine learning enabled information fusion of heterogeneous sensing for infrastructure monitoring |
| University | University of Connecticut (UConn), Storrs, CT |
| Principal Investigator | Jiong Tang, Ph.D. |
| PI Contact Information | Email: jiong.tang@uconn.edu; Phone: (860) 486 5911; Address: Department of Mechanical Engineering, 191 Auditorium Road, Unit 3139, Storrs, CT 06269. |
| Co-PI(s) | N/A |
| Co-PI Contact Information | N/A |
| Funding Source(s) and Amounts Provided (by each agency or organization) | Fast-Act Federal: \$40,298.20 University of Connecticut: \$40,299.05 |
| Total Project Cost | \$80,597.25 |
| Agency ID or Contract Number | 69A3551847101 |
| Start and End Dates | October 1, 2023 – September 30, 2024 |
| Brief Description of Research Project | In this project, we plan to develop a framework for machine learning enabled information fusion of heterogeneous sensing for infrastructure health monitoring. This framework integrates together traditional sensors as well as newly invented sensing techniques, and utilizes machine learning to automatically extract fault features in infrastructure to facilitate highly accurate and robust decision making. The key aspect of the project is the collective utilization of different sensing techniques that can take advantage of their respective merits and avoid the drawbacks. Machine learning can maximize the effective usage of data to uncover the early symptoms of faulty conditions in infrastructure. |
| Describe Implementation of Research Outcomes (or why not implemented) | To be completed after actual implementation has occurred |

| | |
|---|--|
| Place Any Photos Here | |
| Impacts/Benefits of Implementation (actual, not anticipated) | To be completed after actual implementation has occurred |
| Web Links <ul style="list-style-type: none">• Reports• Project website | |