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| UTC Project Information | |
| Project Title | Autonomous Emergency Navigation to a Safe Roadside Location |
| University | Virginia Tech |
| Principal Investigator | Tomonari Furukawa |
| PI Contact Information | Department of Mechanical Engineering 225 Goodwin Hall, 635 Prices Fork Road, Blacksburg, VA 24061 Tel: 540-231-2396, E-mail: tomonari@vt.edu |
| Funding Source(s) and Amounts Provided (by each agency or organization) | Safe-D funding: \$63,083 Matching funding: \$108,675 |
| Total Project Cost | \$171,758 |
| Agency ID or Contract Number | Grant No: 69A3551747115 Project: 03-073 |
| Start and End Dates | 1/15/18 - 12/31/18 |
| Brief Description of Research Project | The project will enhance traffic safety of automated vehicle systems when road emergencies take place by enabling the vehicle to navigate autonomously to stop out of the travel path of following vehicles. |
| Describe Implementation of Research Outcomes (or why not implemented) | In this Phase I period, we will develop a technology to autonomously perform localization, mapping and road surface estimation. The capabilities and limitations of the developed technology will be investigated using recorded experimental data. |
| Place Any Photos Here | |

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| <p>Impacts/Benefits of Implementation (actual, not anticipated)</p> | <p>Up to now, there are no vehicles that are equipped with a capability to autonomously navigate the vehicle to a safe roadside location in an emergency. Situations requiring safe emergency stopping can happen from medical incapacitation, seizures, or falling asleep. The impact of developing this technology is very high.</p> |
| <p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project website | <p>https://www.vtti.vt.edu/utc/safe-d/index.php/projects/autonomous-emergency-navigation-to-a-safe-roadside-location/</p> |