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| **UTC Project Information** | |
| Project Title | MPC 433- Real-Time Traffic Management to Maximize Throughput of Automatic Vehicles |
| University | Utah State University |
| Principal Investigator | Thidapat (Tam) Chantem |
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| Funding Agencies | USDOT, Research and Innovative Technology Administration |
| Agency ID or Contract Number | DTRT12-G-UTC08, Modification No. 1 |
| Project Cost | $100,000 |
| Start and End Dates | January 1, 2013- May 31, 2015 |
| Project Duration | 2.5 Years |
| Brief Description of Research Project | To increase capacity and the efficiency of the U.S. highways and interstates, common maneuvers performed by automated vehicles such as lane changing, exiting, and merging should be accomplished in such as way as to maximize throughput and reduce, if not eliminate, accidents. Existing work on lane changes, which either assumes restricted number of lanes on a given road e.g., [Habenicht2011, Naranjo2008] or focuses on the collision avoidance aspect of the problem e.g., [Jula2000, Wakasugi2005], does not attempt to reduce congestion by maximizing throughput.  **Research Objectives:**  The overarching goal of this project is to design a framework to maximize the throughput of automated vehicles during typical maneuvers such as lane changes, exiting, and merging. The framework will consider a transportation system that consists of both automated vehicles and vehicle platoons. The successful completion of this project will result in an increase number of lane changes during a given time interval, less congestion, and fewer accidents. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here |  |
| Impacts/Benefits of Implementation  (actual, not anticipated) |  |
| Web Links   * Reports * Project Website |  |