

impact

Nayar Prize I quarterly report

February, 2016

Project: The Driverless City

Team: Marshall Brown, Lili Du, Laura Forlano, Jack Guthman, Ron Henderson

Progress:

- A detailed work plan was developed to guide efforts through fall 2016.
- The team conducts bi-weekly meetings to review progress, goals, and milestones.
- The entire team developed a selected bibliography and worked on literature review for the month of December, each focusing on their area of expertise. Marshall Brown is currently synthesizing the findings, which will be organized into an essay for dissemination in publications and/or conferences.
- A team research trip has been planned to the University of Michigan driverless car test bed for April 2016.
- Lili Du received a \$500,000 NSF CAREER grant for her research on Online Coordinated Routing and Decentralized Control for Connected Vehicle Systems.
- Software for Lili Du has been procured through the Nayar Prize fund to conduct coordinated car following simulations.
- The Nayar team held a half-day workshop on January 27, 2016.
 - Each team member presented current research.
 - The team developed a list of research topics, which has been translated into a graphic “mind map.”
 - Associate Professor Matthew Spenko and Assistant Professor Mathieu Joerger gave a presentation on their research on driverless cars, navigation, and safety.



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- Laura Forlano has begun designing a modified version of “The Thing from the Future” scenario development tool for the Driverless City.
- Ron Henderson organized and has begun teaching an advanced landscape architecture studio together with Assistant Professor Conor O’Shea focused on the driverless studio.
 - Students have conducted research studying the history of transportation infrastructure and “benchmarking” the 21st century street.
 - The research team participated in a four-hour workshop with the students, including presentations from students and research faculty. The entire group participated in the first test run of Prof. Forlano’s modified version of “The Thing from the Future.”
 - The studio attended the Chicago Auto Show to benchmark current automobile technologies and interview manufacturers.

Updated plans for second quarter:

- Professor Ron Henderson’s advance landscape architecture studio will continue developing scenarios and designs, concluding with presentations at the end of April 2016.
- Professor Lili Du will develop coordinated car following models.
- Entire team, together with landscape architecture students, will visit the University of Michigan test bed in April 2016.
- Laura Forlano will begin organizing and leading stakeholder interviews.
- Research team will conduct additional workshops and begin developing scenarios.