

Facts about Tartan Racing and “Boss”

What we are: Tartan Racing is a team of faculty, students and staff preparing an autonomous vehicle for entry in the Defense Advanced Research Projects Agency’s 2007 Urban Challenge. The team unites academia and industry through a consortium including Carnegie Mellon University, General Motors, Caterpillar, Continental AG.

What the Urban Challenge is about: The challenge is for a self-driving car to safely navigate an urban environment. The Nov. 3, 2007, event will require unmanned vehicles to navigate a course, including merging traffic, stop signs and intersections, without remote control by humans. The winning vehicle will be the first to negotiate 60 miles of roads and obstacles in no more than 6 hours.

Why we are doing this: Tartan Racing is competing to win the Urban Challenge (and its \$2 million prize), but more importantly to make driving safer, to create new autonomous navigation and robotic technologies, and to change the world’s perception of what is possible.

Who we are: William “Red” Whittaker, Fredkin Research Professor of Robotics, is team leader. Chris Urmson of the Carnegie Mellon Robotics Institute is director of technology. Other faculty members include Sanjiv Singh, Martial Hebert and Anthony Stentz from the Robotics Institute and Raj Rajkumar of the General Motors Collaborative Laboratory at Carnegie Mellon. Engineers embedded in the team by sponsors include Hong Bae of GM, Michael Darms of Continental AG, David Ferguson of Intel and Michael Taylor of Caterpillar.

Sponsors: General Motors, Caterpillar, Continental AG, Intel, Google, Applanix, NetApp, TeleAtlas, Vector, Ibeo, Mobileye, CarSim, CleanPower Resources and M/A-COM, HP and McCabe Software. DARPA also selected Tartan Racing as one of 11 teams that will receive up to \$1 million in federal funds for technology development.

The vehicle: A 2007 Chevy Tahoe called Boss will be Tartan Racing's entry in the 2007 DARPA Urban Challenge. Two Tahoes have been modified for autonomous driving and will be electronic and mechanical near-twins. By DARPA rule, only one of the team's vehicles can race.

The name: "Boss" is derived from Charles F. "Boss" Kettering, the founder of Delco and vice president of GM Research Corp. Kettering (1876-1958) was a prolific inventor who believed in the innovative power of research teams and the benefits of practical education. His 300 inventions are wide ranging and include the first all-electric ignition system, the lightweight diesel engine, safety glass, and an incubator for premature children.

Team contact: Michele Gittleman, project manager, 412-268-6556, info@tartanracing.org

Media contacts: Byron Spice, 412-268-9068, bspice@cs.cmu.edu, or Anne Watzman, 412-268-3830, aw16@andrew.cmu.edu

www.tartanracing.org