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Outreach



F1/10: Autonomous Racing Competition

1/10th the scale. 10x the fun!

The F1/10 competition focuses on creating a meaningful and challenging design experience for students. The competition involves designing, building, and testing an autonomous 1/10th scale F1 race car (capable of speeds in excess of **40MPH**) all while learning about perception, planning, and control for autonomous navigation. In addition to providing lectures and reading material as an online teaching kit, we will host the autonomous racing competition at Embedded Systems Week 2016 and Cyber Physical Systems Week. More details at <http://f1tenth.org>

AutoBits: Senior Project Mentoring at SIU (2017)

You're probably familiar with Lego, a game where a few basic building blocks can be used to build intricate structures limited only by patience and creativity. What if, in a few extra steps, we could endow our structures with a degree of autonomy? I will be mentoring a group of students at Southern Illinois University (SIU) Carbondale on the design of a kit for easy-to-assemble autonomous robots. The objective is for the students to experience design trade-offs, including budget, weight, form factor, power consumption, and esthetics. This is part of the class **CS498/9**, a Senior Project in Computer Science where students plan a team project that is representative of what they may encounter in their professional employment. This involves team formation, project selection, project planning, proposal writing, and proposal presentation. Class taught by **Dr. Bardh Hoxha**.

