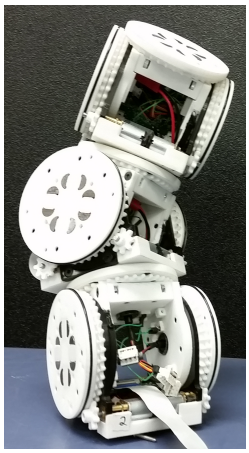
Autonomous Systems Lab (ASL) M.Eng and Undergraduate Project Openings for Spring 2016

The Autonomous Systems Lab seeks a small group of students (undergrad and/or MEng) to work with our PhD students on robotics applications and research. The two primary projects are Skynet and Modular Robotics (pictures below).



Skynet Projects: 3+ students to work on advanced autonomous driving capabilities. Specific jobs include developing mapping software to map urban environments, using a combination of Google Maps/Streetview, survey data, and logged data from Skynet; sensing lane lines and cars from camera data using off the shelf MobilEye sensor; segmentation and processing of lidar data to detect people, cars, cyclists, lane lines, ground and other environmental features while driving.

Modular Robot Projects: 2+ students to work with a set of 10+ modules in a modular robotics project. Our group will focus on reconfiguring the modules to move and sense the environment; 1-2 modules will have an advanced Intel RGB-D sensor. A key project will be to develop an approach to sense/infer the pose of the robot, which would include both its configuration, location, and heading in the environment. Working with the hardware and a companion simulator are also key elements.

Background/interest in programming, computer architecture, and robotics is preferred. Students are expected to sign up for 3-4 credits of (…ECE/MAE/CS Independent study courses or MEng courses) during the semester, and thus commit at least 9-12 hours per week in the ASL.

How to apply:

1. Go to cornell-asl.org and download an Application Form from the front page
2. Fill out and e-mail your **completed application and/or resume/CV** with the subject line : "[Spring ASL application] <Your Name"
   and send to Professor Mark Campbell, mc288@cornell.edu