

## Autonomous Systems Lab (ASL) Undergraduate Project Openings for Fall 2015

The Autonomous Systems Lab seeks a small group of students across different departments to work with our PhD students on robotics applications and research. Details on the project descriptions, application process, and additional notes are given below.



**Segway RMP50/50XL outdoor robot fleet, equipped with Septentrio GPS, 180 deg FOV SICK and 270 deg FOV Hokuyo Lidar, Mimo touchscreen interfaces, Firefly Cameras, onboard IMU, mobile WiFi, custom electronics and mounting hardware.**

### Notes:

-Undergraduate students are expected to sign up for 3-4 credits of (...ECE/MAE/CS Independent study courses) during the semester, and thus commit at least 9-12 hours per week in the ASL. A commitment of two semesters or a summer and a semester is desired. We are also willing to consider employment, especially for those who have work study credit.

### How to apply:

1. Go to [cornell-asl.org](http://cornell-asl.org) and download an application form from the front page
2. Scan and e-mail your **completed application and your resume/CV** with the subject line : "[Fall 2015 ASL application] <Your Name>, Project <Project Number>," where <Your Name> is your name and <Project Number> is the number of the project listed below. Please send your application and resume/CV to one of the following people:  
Professor Mark Campbell, [mc288@cornell.edu](mailto:mc288@cornell.edu)  
Jennifer Padgett, [jpp263@cornell.edu](mailto:jpp263@cornell.edu)

**Robotic Manufacturing and Testing: 2-3 MAE/ECE students:** Machine shop certification and wiring experience highly desired

**Description:** This project encompasses updating our robotic platforms to be more rugged and able to operate outdoors in adverse environments such as rain sleet or snow.

**Who should apply:** Freshman and sophomore students are encouraged to apply. This project is meant as an introduction to our robotic systems to instill a deep understanding of our primary research platform. This will give students an overview of the capabilities of our systems as well as their limitation. In addition, students will be expected to re-build a robotic platform from scratch and perform robustness and reliability testing. In other words, you will build your own robot!