**ECE 486 project Description Spring 2015 #5**

**Project Title:** Intelligent Ground Vehicle

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**Abstract:**

The Intelligent Ground Vehicle (IGV) is a robotic vehicle that is designed to autonomously navigate an obstacle course according to the rules of the Annual Intelligent Ground Vehicle Competition. A prototype robotic car is currently available which is being migrated to a retooled golf cart. Presently, the golf cart has a rudimentary system where it is able to run "hands off" and stop with a signal from a wireless stop unit.

For this semester, a team is desired to build on the efforts of past semesters:

1. Develop a servo system to control the steering mechanism and Integrate the servo system with the current electronics and embedded computing system
2. Develop a computer vision system to identify and avoid obstacles
3. Optimize the navigation system

More information about the competition can be found at http://www.igvc.org/.