We are looking for self-motivated undergraduate students to work on designing and building autonomous racing robots. These racing robots are one-tenth the scale of F1 racing cars and could travel up to a maximum speed of 40 mph. The goal of the project is to compete in F1/10 Autonomous Racing Competition.

The positions require a commitment of at least 10 hours of work per week.

For more information on the racing competition, please check out F1tenth at [http://f1tenth.org/](http://f1tenth.org/)

Apply at [https://our.ucf.edu/](https://our.ucf.edu/)

Contact:
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We are hiring undergraduates for the following positions:

**Hardware development**

**Responsible for**
- Building the autonomous platform
- Establishing communication peripherals (RF, WiFi, Serial)
- Configuring sensors (LIDAR, IMU, etc.)
- Firmware development for driving motors

**Qualifications**
- Basic understanding of embedded systems and microcontrollers
- Basic C/C++ programming
- Experience with soldering (preferred)
- Experience with low-level communication protocols (preferred)

**Software development**

**Responsible for**
- Setting up GPU development platform (NVIDIA Jetson)
- Assisting in the implementing of navigation algorithms
- Setting up simulation environment for testing

**Qualifications**
- Python, C/C++ programming
- Familiarity with GNU/Linux operating system
- Shell scripting (preferred)
- Familiarity with ROS (preferred)
- Basic understanding of machine learning (preferred)