

**FACULTY MENTOR** Khoshabeh, Ramsin & Raul Pegan

**PROJECT TITLE** IoT, Data Analytics, Computer Vision, and More...

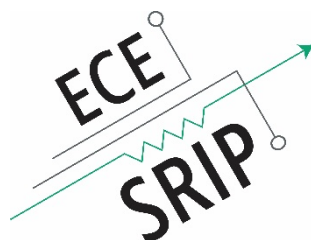
### **PROJECT DESCRIPTION**

We are working on an extensible IoT plug built upon the Raspberry Pi platform. The platform integrates various sensors and communicates with a cloud server for generic IoT applications. We have a number of ideas for projects the selected intern can participate in that will use the plug as the backbone, including healthcare, home automation, and surveillance applications. Depending on the project of interest, the skillset for the intern can vary from 3D prototyping, machine learning, computer vision, big data.

**INTERNS NEEDED** 1 MS Student OR 1 Undergrad Student

### **PREREQUISITES**

Candidates are expected to have basic knowledge in the area they wish to work in with the plug (e.g., image processing and computer vision). Experience in a programming language (C/C++/Python/HTML/CSS) is highly encouraged.



**FACULTY MENTOR** Khoshabeh, Ramsin & Raul Pegan

**PROJECT TITLE** Glasses-free 3D and Reconstruction from Stereo

### **PROJECT DESCRIPTION**

We have developed robust algorithms to convert stereoscopic videos to multiview autostereoscopic 3D in real-time. There are many possible applications ranging from medicine to 3D reconstruction, prototyping, and printing. We are looking for students to continue developing the work and exploring various applications as their interests lead them.

**INTERNS NEEDED** 1 MS Student OR 1 Undergrad Student

### **PREREQUISITES**

Candidates are expected to have basic knowledge in image processing and computer vision, along with some programming skills in C++ (Nvidia Cuda would be highly advantageous).

