Senior Design Lab
Members

Stephen Walker-Weinshenker: Electrical Engineer
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Supervising Professor: Edwin Chong

Summary

The senior design lab is a designated lab for use by engineering students working on projects for their senior design class and some independent studies. This lab needs to be monitored, managed and improved by a team. This team will be responsible for maintaining equipment, setting up new equipment, teaching students to use this equipment, making manuals for the existing equipment and making overall improvements to the lab wherever possible. Our team will as well be responsible for addressing issues with any equipment that may be giving students problems and communicate with students about possible lab problems and improvements. In summary, our team is important for the assistance of students and the success of all other projects.

Importance

This is an important project as it allows the continued use of the lab and its equipment by students who need it and help the other project teams working more efficiently. Along with this, the adding of newer or more efficient tools in the lab as well as general equipment knowledge will help all lab users a greater opportunity for project progression.

Revision History

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Next Semester Plan

Going into next semester we a number of things we plan on doing. The first thing we will do at the beginning of the second semester is to clean up the lab. We will sweep, clean the benches, clean the equipment and make sure all current equipment is up and running properly. The next thing we hopefully plan to do is finish the jacks and outlet project as it is important in continuing on with other future projects. We are currently waiting on budget approvals and facilities in order to progress in the outlet project and hope to have it done by February. Once the outlet project is completed we can start to work on the octoprint project. This project will entail setting up the 3d printers on the network and installing function webcams to monitor job in progress online.

In the meantime while we wait for the jacks and octoprint project to continue, we can continue to work with EIRs to update and remodel the large table sized CNC machine. We have already begun this process with brainstorming ideas, looking into new microchips and looking up open source software that should work for a CNC machine. This will be one of our big projects and most likely take several months to finish. We do not currently have a estimated completion time.

Lastly, we will continue to get feedback from the lab users about places where the lab can be improved and what equipment needs fixed or replaced. This includes installing to lights for the workstation, getting new soldering tips which have already been requested to John Seim, and most importantly making sure the 3d printer continue to work properly.

In conclusion we plan on setting up octoprint, remodeling the table CNC machine, continuing to improve the lab material for students and continuing to maintain the functionality of all current equipment come the second semester.