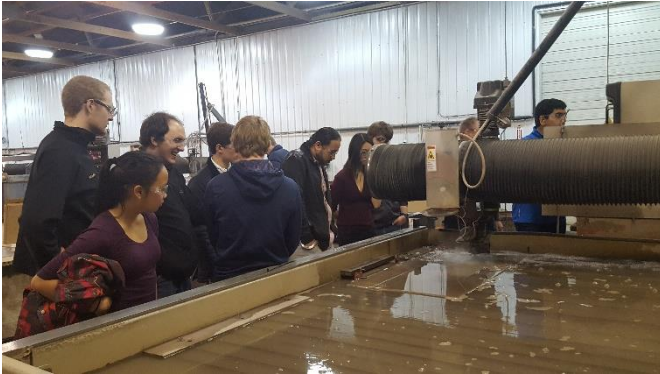


Purdue IEEE ROV Newsletter

March 2017



Hello ROV supporters, members, alumni, and interested parties! The Purdue IEEE ROV team has had a super busy first half of the second semester. The first thing you probably notice is the new ROV logo to the right. Feel free to let us know your thoughts on it. Not only do we want to have the best robot, but we want to have a classy logo to accompany our team!



The team is manufacturing parts using a waterjet in Indianapolis

The beginning of this semester was spent finishing up our designs. As soon as those were done, the team fully entered the manufacturing part of the season! The mechanical team led the trip to Indianapolis to the Waterjet Cutting of Indiana company who graciously let the team use their waterjet to cut all of our aluminum pieces. The frame was the most intricate piece cut and it resulted in the lightest frame in team history. It was subsequently anodized and we are excited with how it is coming together! Electrically the team received their PCBs (printed circuit boards) that were previously designed in

EAGLE and sent to board houses for fabrication. All boards were then hand soldered and tested to ensure they worked as designed. While we ran into issues with one of the power brick boards, it was quickly fixed and subsequent electrical tests confirm the system works. The team now has a full electrical system that incorporates the Raspberry Pi with a full version of Linux running on the ROV.



ROV X9 Frame Assembly

In addition to the great progress on manufacturing, the team found time to volunteer at the Children's Museum of Indianapolis for Engineering Day. While there, we taught children about various aspects of engineering. It ranged from simple mechanical construction to building



Members volunteer at the Children's Museum in Indianapolis

basic circuits. We were also able to show both the children and their parents an old ROV as an inspiration for what could be done with an engineering degree!

Shortly after spring break we plan to have ROV X9 ready for a pool test. At that time, we will name it, begin pilot practice, finish the mission specific tools, and work on the technical documentation. Please let us know if you have any questions about our progress or any comments on our season!

Boiler Up!
Purdue IEEE ROV
purdueieee.org/rov