

ET NavSwarm Weekly Progress Report

Goals for Last Week:

- Prepare for ME 755 presentation on Thursday, November 29 at 2:30pm.
- Continue to refine bot design. Create engineering drawings for manufacturing.
- GPS continues to work on new coordinate system. Start moving data from GPS to Arduino and Pi.
- Continue working on IMU heading.
- XBee continues to learn about Pi integration.

What got done:

- Basic PID controller designed with simple system dynamics.
- Modularity Design finished. If implemented would add an additional \$7 per bot for raw materials.
- Started PSO programming.
- Accumulated components to work with Pi, working on interfacing with XBees with Pi.
- Adjusting solid models for manufacturing.
- With GPS mostly complete, switching to PSO team.

Goals for Next Week:

- Continue developing a controller that fits our system dynamics.
- Combine modularity design with chassis and suspension.
- Submit for water jetting quote early next week.
- Finalize order list for bots. Hopefully order parts before break so that we don't waste time waiting for them.