

Progress Review 3

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Auto Pirates

Autonomous Water Taxi

Progress Review Goals

What we promised!!

- ▶ ☐ Get real radar data (from RECboat at NREC).
- ▶ ☐ Test the minimum range and size of obstacles that radar will be able to detect.
- ▶ ☐ Plan logistics for first field test.
- ▶ ☐ Get coordinates of location from OpenCPN to create occupancy grid map.
- ▶ ☐ Create a grid of size $Y \times Y$ (square boxes of occupancy grid map)
- ▶ ☐ Work to see how this grid can be used with SBPL code (Will show progress).
- ▶ ☐ Explore how we can use STAGE as a 2D simulator for our project.
- ▶ ☐ Design PCB for the assignment.

Demonstration – Perception

Time for some “action”!!

- ▶ ☒ Get real radar data (from RECboat at NREC).
- ▶ ☒ Test the minimum range and size of obstacles that radar will be able to detect.

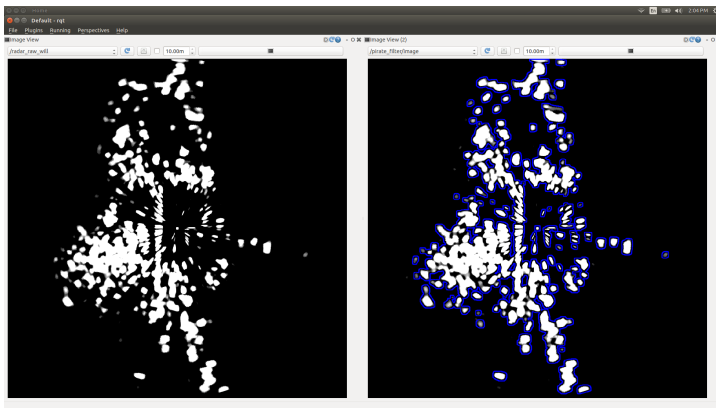


Figure : Raw Radar Data and Visualization

Demonstration – Path Planning

Time for some “action”!!

- ▶ ☒ Work to see how this grid can be used with SBPL code (Will show progress).
- ▶ ☒ Explore how we can use STAGE as a 2D simulator for our project.



Figure : Occupancy Grid Map

Field Test

Time for some “action” !!

- ▶ ☒ Plan logistics for first field test.
- ▶ ☒ Design PCB for the assignment.

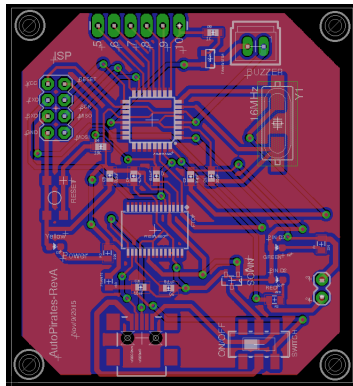


Figure : PCB

Thank You

Thank You :)



AUTO PIRATES