

REU Presentation:

Week 9

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CITRONAULT



This Week's Progress



- Sunday's tests were successful
 - Tested Torpedo Launcher, State Machine, and our PID controller.

Team's Progress

- Two new cameras have arrived!
 - Smaller, same resolution, but they are picking up colors better than our original cameras.
- Torpedo launcher mounted and functional.
- Two new plexiglass canisters ordered.
 - Longer, to provide more room for components.
- Team website and paper complete.
- Will be doing in water testing today!
 - Will collect data from new cameras.

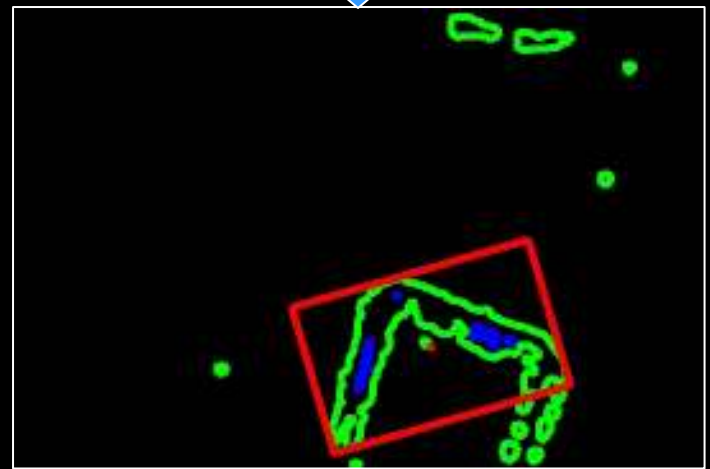
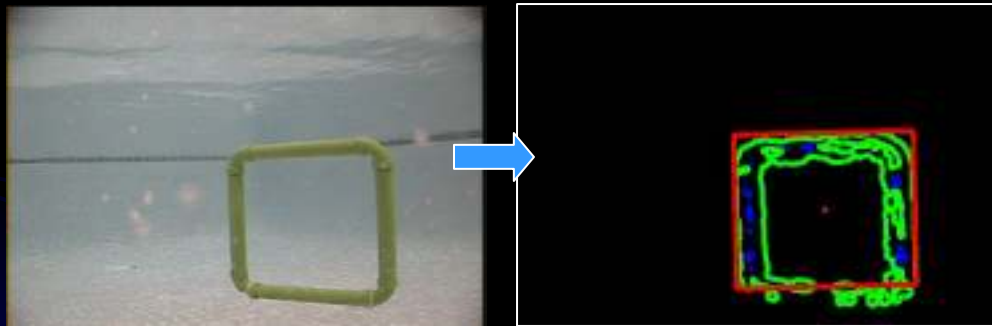
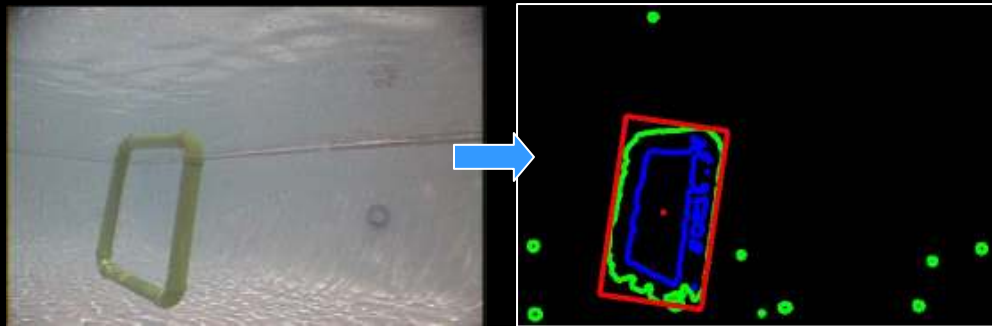
What Still Needs Work

- Arm for briefcase retrieval still needs to be mounted.
- Hydrophone triangulation is being tested, but it's not quite working yet.
 - Recently received custom PCB from manufacturer.
- Integration of the rest of my code with the sub.
 - Needs to be set to return correct values called by state machine functions.

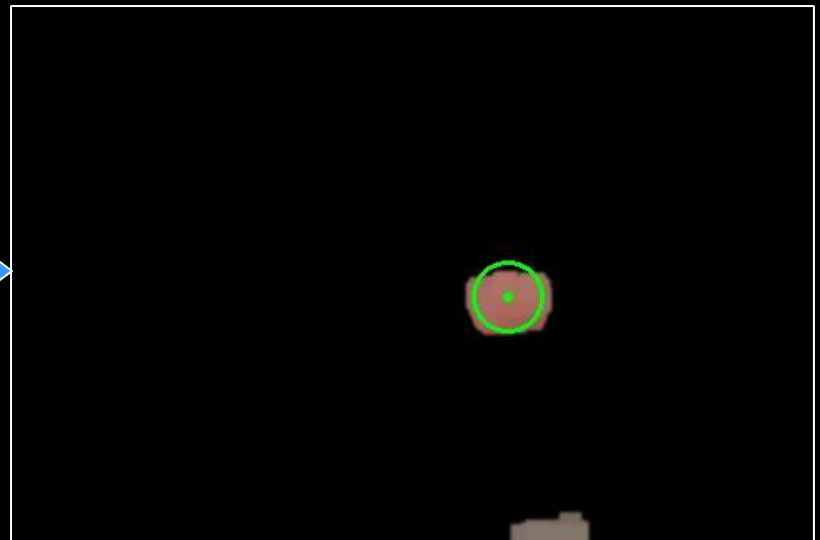
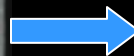
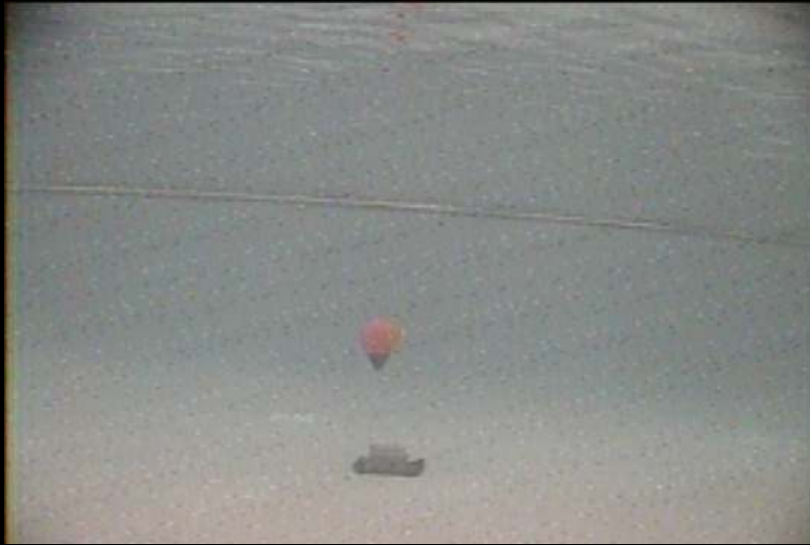
Progress

- After help from team member, I can now do box-fitting on my images
- Box-fitting can now be implemented for finding the machine gun nest
- Will soon be implemented on barbed wire and pipeline following code
- Flare code now returns more information to state machine

Machine Gun Nest



Flare



Goals for Next Week

- Finish everything!
- The competition begins July 28th, so next week is the last full week before the competition
- Lots of in-water testing and troubleshooting

Useful Links

- Robotics Lab at UCF:
 - www.robotics.ucf.edu
 - Click “Underwater” tab on the left side menu for the AUV’s page
- Competition:
 - www.AUVSI.org
- SPAWAR/TRANSDEC:
 - <http://enterprise.spawar.navy.mil/>