



Mixed Reality Robotics Platform



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Project Objective and Intern Contribution:

Our aim was...

- To rapidly research, develop, and test a Virtual Reality proof of concept for the U.S Navy.
- To remotely operate a robot and successfully navigate it through a scale model of unique workspaces that exist on naval vessels.

The methods we used to accomplish this aim were...

- Teamwork, research, hardware testing, robotics building and software troubleshooting.

We were assigned to...

- Plan and build a robot
- Implement mixed reality technology to a remotely operated robotics system.
- Navigate through a scale model of the unique workspaces that exist on naval vessels.



- 1. What are you most proud of this summer?**
 - Developed a Virtual-Reality project.
 - Demonstrated the capability of MR technology for the U.S Navy of the future.
- 1. Why was the internship valuable?**
 - Hands-on experience in a cutting edge Navy Laboratory.
 - Networked with NAVSEA Engineers and professionals.
- 1. Advice for future cohorts?**
 - Don't be afraid to ask questions
 - Be open to learning, even if you are unfamiliar with the topic.

We demonstrated.....

- The successful creation of an early prototype stair climbing robotics system that has rough but manageable integration of various systems that traditionally do not work together.

The impact for the Navy is....

- proof of concept for future teleoperated robotics systems.

In the future this work will be able to...

- Implementation of vr controls to robot movement.
- A larger scale of the robotics system that provides maintenance.

