**Computer Vision Team Schedule**

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| **Goals** |

The goal of the computer vision team is to create a system using ROS and OpenCV that can detect objects and colors under the water using a camera module, go pro, or webcam (whichever is easiest). This system will provide the signals to the Arduino controlling the thruster movement and navigation.

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| **Winter** |

Week 1 (Dec 17-23) Finish learning about ROS, practice programming packages, nodes, messages, services etc. Create architecture.

Week 2 (Dec 24-30) Work on CV system programming, learn how to use OpenCV. Research options, finalize architecture

Week 3 (Dec 31-Jan 6) Work on programming

Week 4 (Jan 7-13) Work on programming

Week 5 (Jan 14-20) Work on programming

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| **Spring** |

Week 1 (Jan 21-27) Test system with simple object detection, make changes as needed

Week 2 (Jan 28-Feb 3) Continue testing and bug fixing

Week 3 (Feb 4-10) CV system ready for pool testing.

Week 4 (Feb 11-17) Work on interfacing navigation system

Week 5 (Feb 18-24) **Have a test-ready vehicle (assemble everything)**

Week 6 (Feb 25-Mar 3) Finish interfacing navigation system

Week 7 (Mar 4-10) Second pool test: image collecting

Week 8 (Mar 11-17) Third pool test: image collecting

Week 9 (Mar 18-24) Fourth pool test: image collecting and CV testing

Week 10 (Mar 25-31) Fifth pool test: image collecting and CV testing

Spring Break (Apr 1-7) Finish CV integration with weapons systems. Sixth pool test: weapons systems

Week 11 (Apr 8-14) Testing

Week 12 (Apr 15-21) Testing

Week 13 (Apr 22-28) Testing

Week 14 (Apr 29-May 5) Testing

Week 15 (May 6-12) Testing