

Akshay Hinduja

Week 53

- 702108 - Deployable AI
- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office
 - 12/16-12/23 out for wedding

Week 52

- 702108 - Deployable AI
- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office
 - 12/16-12/23 out for wedding

Week 51

- 702108 - Deployable AI
- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office
 - 12/16-12/23 out for wedding

Week 50

- 702108 - Deployable AI
 - Sent JCB005 for RMA
 - Test new boards to see if issue is resolved
- 902204 - Scalable Robotics
 - Provided lcn broadcast enabled watercolumn and snippet additions to norbit driver
 - Check in with Mauro for s7k integration
- 902101 - LRAUV Technology Development
 - Looked at nc4 logs and netCDF4 library to read LRAUV data
 - Wrote python script to extract most pertinent information relating to vehicle state

- Looking at gazebo interface with Irauv-applications to see how to feed this information to the simulator
- Overhead
- Out of Office
 - 12/16-12/23 out for wedding

Week 49

- 702108 - Deployable AI
 - RMA request sent for JCB005 board which had anomalous behavior in 4 and 6 cam mode, making it difficult to get full resolution images at 60fps.
- 902204 - Scalable Robotics
 - Add LCM broadcasting for water column and snippet raw data for Norbit to beta python driver
 - Work on waterfall visualizer with Javiera
- 902101 - LRAUV Technology Development
 - Go through tethys visualizer tool reading nc4 data. Will reverse engineer to work on reading nc4 data and see inroads to gazebo sim.
- Overhead
- Out of Office
 - 12/5, 12/6 WFH
 - 12/16-12/23 out for wedding

Week 48

- 702108 - Deployable AI
 - Test issues with Connect Tech JCB005 board. Conclusion is to RMA board and try another one. Inconsistent connection issues made it impossible to run 3+ cameras at full res and full fps
- 902204 - Scalable Robotics
 - Finished snippet and water column data streaming in alpha driver
 - Sync with Mauro for s7k translation
- 902101 - LRAUV Technology Development
 - Going through relevant repositories, particularly TethysDataViz to plan simulator replay approach
- Overhead
- Out of Office 11/13 WFH, 11/20 possibly WFH, 12/2 WFH

Week 47

- 702108 - Deployable AI
 - Troubleshoot camera board issue with Connect Tech. Unable to use all ports, with at least 2 not showing camera feed
 - Contact allied vision onto why we are not getting advertised fps at full resolution
- 902204 - Scalable Robotics

- Implement water column and snippet data reading for Norbit driver
 - Assist Mauro with s7k file generation
 - Start beta development for C++ driver
- 902101 - LRAUV Technology Development
 - Go through Irauv-application documentation and decoding log files
- Overhead
- Out of Office 11/13 WFH, 11/20 possibly WFH, 12/2 WFH

Week 46

- 702108 - Deployable AI
 - Debug hardware limitations on AVT cameras not getting advertised fps.
 - MIPI cables do not have a rigid connections and prone to disconnections easily
- 902204 - Scalable Robotics
 - Assist Eric and Johann to get blueboat ready for maldives trip
 - Look into s7k conversion. Not as straightforward, and may have limitations on norbit side
 - Coordinate with Norbit to expand API control for driver
 - Prepare C++ beta
- 902101 - LRAUV Technology Development
 - Meet with Quinn to go through LRAUV workflow. More understanding gained on where to and which repos to look at for gazebo log playback project.
- Overhead
- Out of Office 11/13 WFH, 11/20 possibly WFH, 12/2 WFH

Week 45

- 702108 - Deployable AI
 - Wrote python scripts to leverage gstreamer library to run cameras on agx orin
 - Troubleshoot issues with multicam. Only one camera is responsive
 - Contact Connect Tech for possible solutions
- 902204 - Scalable Robotics
 - Bug fixes for gui-control behaviour
 - Integrate s7k logging into alpha driver
 - Prepare beta driver system
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office 10/15 WFH

Week 44

- 702108 - Deployable AI
 - Test multi-cam setup on AGX Orin
 - Start writing scripts to control cameras through python
 - Write setup documentation

- 902204 - Scalable Robotics
 - Cruise, Mon Oct 28 2024, all working
 - Write documentation
- 902101 - LRAUV Technology Development
 - Identified python library issue with lcm in docker image. Turning the python requirement off gives a successful build, but may have missing pieces.
- Overhead
- Out of Office 10/15 WFH

Week 43

- 702108 - Deployable AI
- 902204 - Scalable Robotics
 - Finish up lcm messages for metadata for Norbit python driver
 - Prepare for cruise 10/28
 - Update Blue boat driver to latest version
- 902101 - LRAUV Technology Development
 - Finished setup of lrauv sim on Omega-omen, dive deeper into ros message playback
- Overhead
- Out of Office 10/15 WFH

Week 42

- 702108 - Deployable AI
 - Setup allied vision camera on AGX
- 902204 - Scalable Robotics
 - Finished python driver lcm broadcast and viewer
- 902101 - LRAUV Technology Development
 - Get started with Gazebo log playback on Omega Omen
- Overhead
- Out of Office 10/15 WFH

Week 41

- 702108 - Deployable AI
 - Setup allied vision camera on AGX
- 902204 - Scalable Robotics
 - Finished python driver lcm broadcast and viewer
- 902101 - LRAUV Technology Development
 - Get started with Gazebo log playback on Omega Omen
- Overhead
- Out of Office 10/15 WFH

Week 40

- 702108 - Deployable AI
 - Setup Nvidia Deepstream for CTI Rogue carrier board
- 902204 - Scalable Robotics
 - Norbit WBMS driver LCM broadcast
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office
 - WFH Wed Oct 2, Dentist 8am-10am
 - Marine Imaging Workshop Oct7-11

Week 39

- 702108 - Deployable AI
 - Setup Nvidia Jetson AGX Orin
 - Test camera setup
- 902204 - Scalable Robotics
 - Norbit WBMS driver: Fixed visualization issues, working on LCM message generation and reading GUI config files in headless state
- 902101 - LRAUV Technology Development
 - Setup LRAUV-tools on loaner desktop
- Overhead
- Out of Office
 - WFH Wed Sept 25, Fri Sept 27, Wed Oct 2
 - Marine Imaging Workshop

Week 38

- 702108 - Deployable AI
 - Setup Nvidia Orin AGX for new sensor head
- 902204 - Scalable Robotics
 - Continue Norbit WBMS development, working on visualizing bathymetry data
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office

Week 37

- 902204 - Scalable Robotics
 - Working on Norbit WBMS and FLS driver
 - Able to get raw bathymetry data recorded and decoded
 - Current focus on cleaning up architecture to be more modular
 - Aim to get translations to lcm/ros2 in the next week set up
- 902101 - LRAUV Technology Development
- Overhead

- Out of Office
 - WFH 9/11/2024

Week 36

- 902204 - Scalable Robotics
 - Go through initial process familiarity with Eric
 - Get requirements for Norbit driver after discussion with Giancarlo
 - Work on initial architecture design for driver
- 902101 - LRAUV Technology Development
 - Received desktop from IS to retry docker as laptop GPU gave compatibility issues.
- Overhead
- Out of Office
 - WFH 9/4/2024

Week 35

- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office

Week 34

- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
 - Osrif docker image would not compile, got image from Michael which runs example script
 - Facing issue with running tethys simulation, working on bug finding
 - Writing reports on bugs faced and outdated packages to work around.
- Overhead
- Out of Office

Week 33

- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
 - Working on getting lrauv simulator setup on laptop, faced some issues with broken docker image. Trying internal one
- Overhead
- Out of Office

Week 32

- 902204 - Scalable Robotics

- Assist in setup for cruise on 8/8
 - Go through driver repositories for gemini and oculus sonars
- 902101 - LRAUV Technology Development
 - Start familiarizing with LRAUV simulator codebase.
 - Plan to get everything installed, and test logs to visualize real data in simulator
- Overhead
- Out of Office

Week 31

- 902204 - Scalable Robotics
- 902101 - LRAUV Technology Development
- Overhead
- Out of Office