

701139 - ML Tracking

Week 51

1. Kevin Barnard
 - a. Submitted paper to Nature Communications

Week 50

1. Kevin Barnard
 - a. Preparing submission to Nature Communications

Week 49

1. Kevin Barnard
 - a. Preparing submission to Nature Communications

Week 46

1. Kevin Barnard
 - a. Looking for cs.RO arXiv endorsement

Week 43

1. Kevin Barnard
 - a. Submitted manuscript to Science Robotics for special issue on “autonomous robots for exploration & beyond”

Week 37

1. Kevin Barnard
 - a. Data analysis for Science Robotics submission

Week 34

1. Kevin Barnard
 - a. Provided i2MAP transect images/localizations to OWOD group

Week 26

1. Kevin Barnard
 - a. Wrapped up all data and code for May 24-25 analysis

Week 25

1. Kevin Barnard
 - a. Wrapped up May 24-25 analysis work to hand off

Week 24

1. Kevin Barnard
 - a. Wrapping up analysis work of May 24-25 deployments

- b. Re-ran CVision AI tracker; extracted full set of tracks from LCM logs

Week 23

1. Kevin Barnard
 - a. Started writing track visualization code
 - b. Working to reconstruct unlogged data for analysis

Week 22

1. Kevin Barnard
 - a. Working to unify detection, tracking, and vehicle LCM events

Week 21

1. Kevin Barnard
 - a. Reviewed track information from May 2021 data
 - b. Started generating visualizations of successful tracks in Discovery mode

Week 20

1. Kevin Barnard
 - a. Continued analysis of May 24-25 data; working on generating visualizations of track information

Week 19

1. Kevin Barnard
 - a. Started generating visualizations of May 2021 deployment data

Week 18

1. Kevin Barnard
 - a. Parsed some more ML-Tracking LCM logs to JSON

Week 17

1. Kevin Barnard
 - a. Hunted down some missing & overwritten LCM types; working to parse more LCM logs

Week 16

1. Kevin Barnard
 - a. Parsed July 2021 ML-Tracking LCM log data to JSON; will load into Postgres DB

Week 15

1. Kevin Barnard
 - a. Started loading 2019/2020 deployment logs into analysis DB

Week 9

1. Kevin Barnard
 - a. Loaded ~23k new localizations from ML-Tracking footage into VARS
 - b. Pulled down new 48k image set for midwater object detector training
 - c. Finished up dfg-tool for digital video framegrabbing

Week 8

1. Kevin Barnard
 - a. Uploaded stereo camera framegrabs for Mini ROV dives 127-129, 149-155
 - b. Wrote [vars-kb-model-resolve](#) to facilitate specification of ML model classes from sub-trees of VARS KB concepts/parts

Week 7

1. Kevin Barnard
 - a. Preparing stereo cam framegrabs/localizations for ingest to VARS; tracking down several videos that failed to load

Week 6

1. Kevin Barnard
 - a. Collected & parsed stereo cam localizations from several MiniROV dives; preparing for load to VARS

Week 2

1. Kevin Barnard
 - a. Forming data analysis database for LCM log files
 - i. Wrote script to auto-generate Postgres schema from LCM type descriptors
 - ii. Spun up GraphQL interface via Postgraphile
 - iii. Wrote loader script to populate database from log file