Philip Robinson

Currently Traveling UTC+2

probinso+res@protonmail.com
(+1) 206.377.9747

https://github.com/probinso

I'm a Scientific Programmer / Machine Learning Researcher driven by interdisciplinary work in natural sciences, security/privacy systems, OSInt &|| citizen sciencery.

Skills/Experience

Machine Learning Global Teams Remote Work MLOps/DevOps
Data Sciences Linux Systems Education/Mentoring Rubber Ducking

Technologies

Python/PyTorch/sklearn R/dplyr GDAL/cartopy/ESA-SNAP AWS/GCP/firebase

C/C++ skimage/scipy.signal Gtirb/Dwarf/asts.AST Docker

Blue Oasis - Digital Twin Engineer (Ocean Sciences) May 2025 - present

Contributed to multi-label edge marine acoustics ML pipeline, to track vessels & marine life Developed & implemented custom features to identify vessel classes, with acoustics researchers Full stack security & performance work on flagship customer facing analytics & IR dashboard

Global Fishing Watch - Scientific Programmer (Earth Imaging) May 2022 - March 2025

Implemented remote sensing pipeline for detecting vessels & matching to reported GPS locations Evaluated vessel detection over terrabytes of processed synthetic aperture radar (SAR) images Developed gfwsat to join & catalog millions of satellite scenes, serving global ocean surveys Developed simple offline satellite image labeler, supporting all shapely geometries by lat/lon Led technology transfer work, moving research prototypes to production & automated pipelines

GrammaTech - Machine Learning Researcher II March 2020 - April 2022

Research on binaries in vulnerability detection & improving code legability from decompilation Developed feature extraction pipeline over hosted virtual machines on terrabytes of data Implemented, verified & incorporated ML/DL code from academic research into release products Participated in authoring & reviewing SBIR/STTR proposals for DOD/DARPA funding solicitations

HappyWhale - Mobile & Full Stack Engineer March 2019 - March 2020

Developed x-platform citizen science phone app for eco-tourism & wildlife population surveys Developed core tools for tracking marine life sightings & individual whale identification Contributed to data access API & web UI, supporting researchers in population ecology studies

NASA JPL - Data Science Intern (Natural Text) June 2018 - Sept 2018

Prototyped employee expert recommender system, to eliminate weeks in ticket triage/assignment Designed & completed prototype from research papers & advisement of top NASA/JPL employees

OHSU Neuroimage Lab - Graduate Research Assistant Oct 2017 - June 2018

Analyzed relationship of adjacent microbiome populations for menopause & reproductive health Developed processing/audit tools for survey & fMRI data to support ABCD study for ADHD/ASD Provided git, project management & security trainings for teams with varying readiness levels

OHSU Masters Research - Machine Learning (Marine Acoustics) Sept 2017 - Dec 2019

Developed track explorer for 10YR continuous audio track, supporting Aloha Cabled Observatory Developed anomaly detectors for noisy marine acoustics, based on variational auto-encoders Measured effects of spectral subtraction & DL models to reduce noise & improve audio quality

Galois Inc. - R&D Software Engineer April 2014 - Dec 2015

Developed processing pipelines & workflows for evaluator work on multiple DARPA SBIR programs Helped run professional trainings to disseminate new probabilistic programming languages Wrote on disenfranchisement under Free & Fair for secure internet voting feasibility study

Oregon Health Science University
Computer Science & Machine Learning

Western Washington University
Computer Science & Cryptography
Bachelor of Science, Math Minor

Masters of Science