

Philip Robinson

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<https://github.com/probinso>

Personal Statement

I love to make hard problems into impactful software solutions and actionable or educational materials. I am an adaptable engineer, whose work history spans products and research in machine learning, science, software engineering, and security.

Skills/Experience :

Python	C, C++	Merry-go-rounds	TDD
R, dplyr	LaTeX	Git	Ticketing Systems

Work Experience

Graduate Research OHSU/ACO - Machine Learning in Marine Acoustics (continuing)

Designed/Led project and managed communication in a remote environment without supervision
Researched deep anomaly detectors, to index bioacoustic events from a 10 year audio track
Measured effects of adaptive spectral subtraction, for audio denoising, on model accuracy
Developed an intuitive ACO track explorer, to help rejuvenate data access for researchers
Identified and implemented advanced/specific machine learning models from research papers
Technologies : ACOio, Keras, tensorflow, PyTorch, scipy.signal, Jupyter, flask, Angular

HappyWhale - Staff Software Engineer March 2019 - present

Contributed as full stack developer on a small team, in both remote and onsite environments
Developed Polar Collective, a cross platform phone application for citizen-science projects
Maintained and contributed to user tools for individual whale identification and tracking
Technologies : NativeScript, Angular, node.js, Android, iOS, PostgreSQL, Java

NASA Jet Propulsion Lab - Graduate Data Science Intern June 2018 - Sept. 2018

Designed & developed Expert Modeling/Recommender System to rank-match engineers to tasks
Fully specified programmatic solution from use-case meetings with top NASA/JPL employees
Open Source contributions to the gensim natural language processing library
Technologies : Python, nltk, gensim, pyLDavis, pandas, Jupyter, Author-Topic-Model, LDA

OHSU Fair Neuroimaging Lab - Research Assistant Oct. 2017 - June 2018

Contributed to microbiome population analytics tools to study female reproductive system
Developed processing pipeline and audit tools for reported and FMRI data, on ADHD/ASD studies
Acted as Open Source and Securities lead, developing trainings and enforcing best practices
Technologies : Python, Bash, R, neo4j, ponyorm, stan, GitLab, Docker

RGB Optics (Part Time) - Remote Contractor/Consultant Nov. 2015 - Aug. 2018

Developed custom photo image processing tools and pipelines for low cost spectral analysis
Authored educational material in light pollution's effect on economy, biology, and technology
Developed natural language processing tools to organize and explore Myeloma clinical trials
Provided technology tutorials and consulting on code optimization, NLP, and image processing
Technologies : Python, skimage, sklearn, AWS, spark, CLiNER, Morphological Watersheds

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

Developed processing pipelines and workflows to enable evaluator work for DARPA programs
Produced biannual quantitative and qualitative reports on for DARPA and language developers
Contributed to PPAML, Overseas Voting Foundation, Safeware, Robot Fast Track
Technologies : Python, SLURM, Scala, Figaro, Chimpy, Docker, Jira, Basecamp

Oregon Health Science University

Computer Science MSc
2016 - present

Machine Learning

Western Washington University

Computer Science BS, Mathematics Minor
June 2012

Computer Science & Cryptography