

Philip Robinson

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<https://github.com/probinso>

Personal Statement

I love turning hard problems into impactful solutions and actionable or educational materials. I am an adaptable engineer with work history in products, education, and research in machine learning, natural sciences, software engineering, and computer security.

Skills/Experience :

Research MVPs	Linux Systems	Training/Mentoring	Ticketing Systems
Data Sciences	Teamwork	Communication	Merry-go-rounds

Work Experience

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 App, a cross platform tool to manage citizen-science projects
Maintained and contributed to user tools for individual whale identification and tracking
Technologies : Native/TypeScript, Angular, Android, iOS, PostgreSQL, Java, Spring, firebase

Graduate Research CSLU/ACO - Deep Learning in Marine Acoustics Sept 2017 - present
Designed, developed, and managed research work in a remote environment without oversight
Researched novel techniques to study/index bioacoustic events from a 10 year audio track
Developed an intuitive ACO track explorer, to help rejuvenate data access for researchers
Implemented analysis tools, denoising, and deep learning models from research papers
Technologies : ACOio, Keras, tensorflow, PyTorch, scipy.signal, Jupyter, flask, Angular

NASA Jet Propulsion Lab - Graduate Data Science Intern June 2018 - Sept 2018
Developed NLP Expert Modeling/Recommender System, automating expensive mission-critical tasks
Fully specified programmatic solutions from use-case meetings with top NASA/JPL employees
Technologies : Python, nltk, gensim, pyLDAvis, pandas, Jupyter, Author-Topic-Model, LDA

OHSU DCAN 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 Git, OSS, and securities lead, developing trainings and enforcing best practices
Technologies : Python, Bash, R, dplyr, 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 consultation 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
Helped run professional trainings to disseminate new probabilistic programming languages
Produced biannual quantitative and qualitative reports on for DARPA and other PPAML teams
Technologies : Python, SLURM, Scala, Figaro, Chimp, Docker, Jira, Basecamp

Dell EMC² Isilon Storage - Software Development Engineer Dec 2012 - July 2013
Designed and developed password manager to supporting self encrypting drives in FreeBSD
Team brought to schedule a lagging anchor release feature in 5 months, to 80% code coverage
Participated in threat modeling for multiple security sensitive applications
Technologies : C, C++, libCheck, Python, SQLite, Subversion, FreeBSD, OpenSSL

Oregon Health Science University
Computer Science & Machine Learning
Masters of Science
2016 - present

Western Washington University
Computer Science & Cryptography
Bachelor of Science, Mathematics Minor
2007 - 2012