

**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, whose work history spans products, education, and research in machine learning, sciences, software engineering, and security.

## Skills/Experience :

Python	C, C++	Merry-go-rounds	TDD
R, dplyr	ET <sub>X</sub>	Git	Ticketing Systems

## Work Experience

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

Designed, developed, and managed research work in a remote environment without oversight  
Researched deep learning models 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, audio filters, & deep 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 App, a cross platform tool to manage citizen-science projects  
Maintained and contributed to user tools for individual whale identification and tracking

**Technologies :** NativeScript, Angular, Android, iOS, PostgreSQL, Java, Spring, firebase

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

Designed & developed Expert Modeling/Recommender System to rank-match expert staff to tasks  
Fully specified programmatic solutions 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 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 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

**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, Chimp, Docker, Jira, Basecamp

### Dell EMC<sup>2</sup> 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 approximately 5 months  
Participated in threat modeling for multiple security sensitive applications

**Technologies :** C, C++, Python, SQLite, Subversion, FreeBSD, OpenSSL

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### Oregon Health Science University

Computer Science & Machine Learning  
Masters of Science  
2016 - present

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### Western Washington University

Computer Science & Cryptography  
Bachelor of Science, Mathematics Minor  
2012