

**Philip Robinson**

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## Personal Statement

I love to work on hard problems and value the knowledge needed to generate solutions in new domains. I am an adaptable engineer, whose work history spans products and research in machine learning, software engineering, scientific computing, and computer securities.

## Skills/Experience :

Python	C, C++	Linux	TDD
R, dplyr	TeX	Git	Ticketing Systems

## Work Experience

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

Acted as project lead 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 rejuvenate data access for researchers

**Technologies :** Python, ACOio, Keras, tensorflow, pytorch, scipy.signal, Jupyter

### HappyWhale - Staff Software Engineer March 2019 - present

Worked, as a software developer, on a small team in both a remote and onsite environment  
Developed Polar Collective, a cross platform tablet app 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  
Implemented stable/principled text normalization, tokenization, and model evaluation  
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 OSS and Securities lead, developing, training and enforcing best practices

**Technologies :** Python, Bash, R, neo4j, ponyorm, stan, GitLab, Docker, Trello

### 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, numpy, skimage, AWS, ponyorm, 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

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## Oregon Health Science University

Computer Science MSc  
2016 - present

## Machine Learning

## Western Washington University

Computer Science BS, Mathematics Minor  
June 2012

## Computer Science & Cryptography