

# Philip Robinson

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UTC-8

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<https://github.com/probinso>

## Skills/Experience :

Research MVPs  
ML/Data Sciences

Linux Systems  
Remote Work

Education/Mentoring  
Communication

Ticketing Systems  
Rubber Ducking

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**GrammaTech** - **R&T Machine Learning Engineer** **March 2020 - present**  
Developed distributed feature extraction & ML training pipelines supporting DARPA programs  
Produced ML security research on compiled binaries in decompilation & vulnerability detection  
Evaluated & completed technology transfer of university research work into release products  
**Technologies :** Python, C, PyTorch, Docker, celery, Kibana, GitLab.ci, LevelDB, MongoDB

**HappyWhale** - **Full Stack Developer** **March 2019 - March 2020**  
Developed Polar Collective App, a cross platform phone app supporting citizen-science work  
Core developer for web user tools for whale sight logging, identification, & tracking  
**Technologies :** Native/TypeScript, Angular, Android, iOS, PostgreSQL, Java, Spring, firebase

**Graduate Research CSLU/ACO** - **Machine Learning (Audio Data)** **Sept 2017 - Dec 2019**  
Implemented & transferred deep anomaly detectors from research papers to marine bioacoustics  
Measured effects of spectral subtraction & deep noise reduction techniques on ML models  
Developed ACOio track explorer, enabling research on 10 year (12 TB) continuous audio track  
**Technologies :** ACOio, Keras, tensorflow, PyTorch, scipy.signal, Jupyter, flask, Angular

**NASA Jet Propulsion Lab** - **Graduate Data Science Intern** **June 2018 - Sept 2018**  
Developed employee Expertise Recommender System, automating expensive mission-critical tasks  
Completed deployable prototype from research papers & meetings with top NASA/JPL employees  
Implemented stable/principled text normalization, tokenization, & model evaluation  
**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, studying menopause & reproductive health  
Developed processing pipeline & audit tools for reported & fMRI data, on ADHD/ASD studies  
Authored project guidelines, git trainings, & acted as lab security/privacy representative  
**Technologies :** Python, Bash, R, dplyr, phyloseq, neo4j, ponyorm, stan, GitLab, Docker

**RGB Optics (Part Time)** - **Contractor/Consultant** **Nov 2015 - present**  
Developed image processing tools for low cost spectral analysis, to study light pollution  
Developed natural language processing tools to organize & explore Myeloma clinical trials  
Provide technology tutorials/consultation on code optimization, NLP, & image processing  
**Technologies :** Python, skimage, sklearn, AWS, CLiNER, Morphological Watersheds, OpenCV

**Galois Inc.** - **R&D Software Engineer** **April 2014 - Dec 2015**  
Developed processing pipelines & workflows to enable evaluator work for DARPA programs  
Helped run professional trainings to disseminate new probabilistic programming languages  
Produced biannual quantitative & qualitative reports on for DARPA & other PPAML teams  
**Technologies :** Python, SLURM, Scala, Figaro, Chimp, Docker, Jira, Basecamp

**Dell EMC<sup>2</sup> Isilon Storage** - **Software Development Engineer** **Dec 2012 - July 2013**  
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

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**Oregon Health Science University**  
Computer Science & Machine Learning  
Masters of Science (2019)

**Western Washington University**  
Computer Science & Cryptography  
Bachelor of Science, Math Minor (2012)