

Philip Robinson

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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

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, spark, 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 EMC² 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

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

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