Philip Robinson

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https://github.com/probinso

I'm an experienced Software Engineer / Data Scientist interested in interdisciplinary work in environmental, social good, citizen science, & computer security projects.

Skills/Experience

Research MVPs	Linux Systems	Education/Mentoring	Ticketing Systems
ML/Data Sciences	Remote Work	Communication	Rubber Ducking

Technologies

Python/PyTorch/sklearn	R/dplyr	skimage/OpenCV	RetDec/Dwarf/asts.AST
C/C++	Angular/NativeScript	Docker	Java/scala/figaro

GrammaTech   **– R&T Machine Learning Engineer**   **March 2020 – present**
- Conducted language processing research in decompilation for reverse engineering binaries
- Performed research & evaluated ML work on compiled binaries for vulnerability detection
- Participated in authoring & reviewing SBIR/STTR proposals for DOD/DARPA solicitations

HappyWhale   **– Mobile / Full Stack Engineer**   **March 2019 – March 2020**
- Developed Polar Collective App, a x-platform phone app supporting citizen science projects
- Core developer of user tools in logging whale sightings for identification & tracking
- Contributed to data & access API supporting researchers in population ecology projects

NASA Jet Propulsion Lab   **– Graduate Data Science Intern**   **June 2018 – Sept 2018**
- Developed employee expert recommender system, eliminating weeks in ticket triage/assignment
- Designed & completed MVP from research papers & advisement of top NASA/JPL employees
- Defended unconventional application of advanced topic model to decision makers at JPL

OHSU DCAN Neuroimaging Lab   **– Graduate Research Assistant**   **Oct 2017 – June 2018**
- Contributed to microbiome population analytics, studying menopause & reproductive health
- Developed processing pipeline & audit tools for survey & fMRI data, on ADHD/ASD studies
- Provided git, project management, & security trainings for teams with varying backgrounds

Graduate Research CSLU/ACO   **– Machine Learning (Audio Data)**   **Sept 2017 – Dec 2019**
- Developed deep anomaly detectors for marine acoustics from signal processing research papers
- Measured effects of spectral subtraction & deep noise reduction techniques on ML models
- Developed ACOio track explorer, enabling research on (10 yr/12 TB) continuous audio track
- Led & enabled a four week community data deep dive series through PDSG on marine acoustics

RGB Optics (Part Time)   **– Volunteer Developer & Consultant**   **Nov 2015 – present**
- Developed remote sensing tools for low cost spectral analysis, in light pollution surveys
- Image processing consult on low cost infant hypoxic ischemic encephalopathy (iHIE) tests
- Developed natural language processing (NLP) tools to explore Myeloma clinical trials
- Provided technology trainings/consultation on code optimization, NLP, & image processing

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
- Authored material on disenfranchisement under Free & Fair for the Overseas Voting Foundation
- Produced biannual quantitative & qualitative reports for DARPA & participating PPAML teams

Dell EMC^2 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

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Oregon Health Science University	**Western Washington University**
Computer Science & Machine Learning	**Computer Science & Cryptography**
Masters of Science	Bachelor of Science, Math Minor
2016 – 2019	2007 – 2012