Philip Robinson

UTC-7

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https://github.com/probinso

Personal Statement

I love to make hard problems into impactful software solutions and actionable or educational materials. I am an adaptable engineer, whose work history spans products and research in machine learning, science, software engineering, and security.

Skills/Experience :

Python C, C++ TDD Linux

R, dplyr $\mathbb{E}T_{\mathsf{F}}\mathsf{X}$ Git Ticketing Systems

Work Experience _

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

Designed/Led project 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 help rejuvenate data access for researchers Identified and implemented advanced/specific machine 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, a cross platform phone application 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

- Graduate Data Science Intern June 2018 - Sept. 2018 NASA Jet Propulsion Lab 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 Open Source contributions to the gensim natural language processing library

Technologies: Python, nltk, gensim, pyLDAvis, pandas, Jupyter, Author-Topic-Model, LDA

- Research Assistant OHSU Fair Neuroimaging Lab

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 AHDH/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 Provided technology tutorials and consulting on code optimization, NLP, and image processing

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, Chimpy, Docker, Jira, Basecamp

Oregon Health Science University

Machine Learning

Computer Science MSc 2016 - present

Western Washington University

Computer Science & Cryptography

Computer Science BS, Mathematics Minor June 2012