

Philip [REDACTED]

UTC-8

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(+1) [REDACTED].[REDACTED].[REDACTED]

[https://github.com/\[REDACTED\]](https://github.com/[REDACTED])

I'm an experienced Software Engineer / Data Scientist with passion for interdisciplinary work in environmental, social good, OSInt, & citizen science projects.

## Skills/Experience

Machine Learning	Prototypes	Remote Work	Ticketing Systems
Data Science	Linux Systems	Education/Mentoring	Rubber Ducking

## Technologies

Python/PyTorch/sklearn	R/dplyr	skimage/scipy.signal	[REDACTED]/Dwarf/[REDACTED]
C/C++	Angular/NativeScript	Docker	AWS/GCP/firebase

### - Scientific Programmer

May 2022 - present

ML & Research developer on studies for detection of [REDACTED]  
Developed [REDACTED] to organize and support satellite scene metadata for global research surveys  
Lead technology transfer efforts moving academic prototype code to production ready code  
Optimized data fusion tasks in matching [REDACTED] with results from object detection models  
Managed external relationships with public satellite image providers like [REDACTED], [REDACTED], and [REDACTED]  
Developed inter-departmental collaboration strategies & practices for international [REDACTED] teams

### - Machine Learning Researcher

March 2020 - April 2022

Performed DL/ML research for binary vulnerability detection & decompilation legibility tasks  
Developed big data feature extraction pipeline distributed over cloud hosted virtual machines  
Implemented & incorporated code from academic research publications into release products  
Participated in authoring & reviewing [REDACTED]/[REDACTED] proposals for [REDACTED]/[REDACTED] solicitations

### - Mobile / Full Stack Engineer

March 2019 - March 2020

Developed [REDACTED], a x-platform citizen sciencery app to support ecology research  
Developed core tools for tracking [REDACTED] sightings & individual [REDACTED] identification  
Contributed to data access API, supporting researchers in population ecology projects

### - Graduate Data Science Intern

June 2018 - Sept 2018

Developed employee expert recommender system, to eliminate weeks in ticket triage & assignment  
Designed & completed prototype from research papers & advisement of top [REDACTED] employees

### - Graduate Research Assistant

Oct 2017 - June 2018

Analyzed relationship of adjacent microbiome populations for menopause & reproductive health  
Developed data processing/audit tools for survey & fMRI data, supporting ADHD/ASD studies  
Provided git, project management, & security trainings for teams with varying readiness levels

### Graduate Research [REDACTED] - Machine Learning (Audio Data)

Sept 2017 - Dec 2019

Developed VAEs and anomaly detectors for marine acoustics from signal processing research  
Developed [REDACTED] track explorer, enabling research on 10 year (12 TB) continuous audio track  
Measured effects of spectral subtraction & deep noise reduction techniques on ML models  
Led & enabled a four week community data deep dive, through [REDACTED], on marine acoustics

### - Volunteer Developer & Consultant

Nov 2015 - present

Developed remote sensing tools to classify citiscape light sources for light pollution study  
Image processing consult on low cost blood tests for infant hypoxic ischemic encephalopathy  
Provided technology trainings/consultation on code optimization, NLP, & image processing

### - R&D Software Engineer

April 2014 - Dec 2015

Developed processing pipelines & workflows to enable [REDACTED] work for [REDACTED] programs  
Helped run professional trainings to disseminate new probabilistic programming languages  
Wrote on disenfranchisement under [REDACTED] for [REDACTED] feasibility study

**University**

**Computer Science & Machine Learning**

Masters of Science

**University**

**Computer Science & Cryptography**

Bachelor of Science, Math Minor