

**Philip** [REDACTED] [REDACTED] [REDACTED]+res@protonmail.com  
UTC+2 (+1) [REDACTED].[REDACTED].[REDACTED]  
[https://github.com/\[REDACTED\]](https://github.com/[REDACTED])

I'm a Scientific Programmer / Machine Learning Researcher driven by interdisciplinary work in natural sciences, security/privacy systems, OSInt & citizen sciencery.

### Skills/Experience

Machine Learning	Prototypes	Remote Work	MLOps/DevOps
Data Sciences	Linux Systems	Education/Mentoring	Rubber Ducking

### Technologies

Python/PyTorch/sklearn	R/dplyr	GDAL/cartopy/ESA-SNAP	AWS/GCP/firebase
C/C++	skimage/scipy.signal	[REDACTED]/Dwarf/[REDACTED]	Docker

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#### [REDACTED] - Digital Twin Engineer (Ocean Sciences) June 2025 - present

Contributed to multi-label edge marine acoustics ML pipeline, to track vessels & marine life  
Worked with acoustics researchers to develop & implement custom features for event detection  
Full stack security & performance work on flagship customer facing analytics & IR dashboard

#### [REDACTED] - Scientific Programmer (Earth Imaging) May 2022 - March 2025

Implemented remote sensing pipeline for detecting vessels & matching to reported GPS locations  
Evaluated vessel detection over terrabytes of processed synthetic aperture radar (SAR) images  
Developed [REDACTED] to join & catalog millions of satellite scenes, serving global ocean surveys  
Developed simple offline satellite image labeler, supporting all shapely geometries by lat/lon  
Led technology transfer work, moving research prototypes to production & automated pipelines

#### [REDACTED] - Machine Learning Researcher II March 2020 - April 2022

Research on binaries in vulnerability detection & improving code legability from decompilation  
Developed feature extraction pipeline over hosted virtual machines on terrabytes of data  
Implemented, verified & incorporated ML/DL code from academic research into release products  
Participated in authoring & reviewing [REDACTED]/[REDACTED] proposals for [REDACTED]/[REDACTED] funding solicitations

#### [REDACTED] - Mobile & Full Stack Engineer March 2019 - March 2020

Developed x-platform citizen science phone app for [REDACTED] & wildlife population surveys  
Developed core tools for tracking [REDACTED] sightings & individual [REDACTED] identification  
Contributed to data access API & web UI, supporting researchers in [REDACTED] studies

#### [REDACTED] - Data Science Intern (Natural Text) June 2018 - Sept 2018

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

#### [REDACTED] - Graduate Research Assistant Oct 2017 - June 2018

Analyzed relationship of adjacent [REDACTED] populations for [REDACTED] & [REDACTED] health  
Developed processing/audit tools for survey & [REDACTED] data to support [REDACTED] study for [REDACTED]  
Provided git, project management & security trainings for teams with varying readiness levels

#### [REDACTED] Masters Research - Machine Learning (Marine Acoustics) Sept 2017 - Dec 2019

Developed track explorer for 10YR continuous audio track, supporting [REDACTED]  
Developed anomaly detectors for noisy marine acoustics, based on variational auto-encoders  
Measured effects of [REDACTED] to reduce noise & improve audio quality

#### [REDACTED] - R&D Software Engineer April 2014 - Dec 2015

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

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### University

Computer Science & Machine Learning  
Masters of Science

### University

Computer Science & Cryptography  
Bachelor of Science, Math Minor