

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

## Personal Statement

I am an adaptable engineer with 7+ years computing experience, who loves working on a great diversity of domain problems. My work history spans both products and research in machine learning, software engineering, and computer securities. I have successfully adopted new technologies/languages for nearly every completed deliverable.

## Skills/Experience :

Python	C, C++	Linux	TDD
R, dplyr	TeX	Git	Ticketing Systems

## Work Experience

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### Graduate Research [REDACTED] - Machine Learning in Marine Acoustics (continuing)

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 [REDACTED], an intuitive [REDACTED] track explorer, to rejuvenate data access for researchers  
**Technologies :** Python, [REDACTED], Keras, tensorflow, scipy.signal, Jupyter

### [REDACTED] - Staff Software Engineer March 2019 - present

Worked as software developer in nimble small team in both a remote and onsite environment  
Developed [REDACTED], a cross platform tablet application for managing citizen-science projects  
Maintained and contributed to user tools for [REDACTED] identification and tracking  
**Technologies :** NativeScript, Angular, node.js, Android, PostgreSQL

### [REDACTED] - Graduate Data Science Intern June 2018 - Sept. 2018

Fully specified programmatic solution from use-case meetings with top [REDACTED] employees  
Designed & developed Expert Modeling/Recommender System, by extending the Author-Topic-Model  
Implemented stable/principled text normalization, tokenization, and model evaluation  
Open Source contributions to the [REDACTED] library  
**Technologies :** Python, nltk, gensim, pyLDavis, pandas, Jupyter

### [REDACTED] - Research Assistant 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 ADHD/ASD studies  
Acted as OSS and Securities lead, developing, training and enforcing best practices  
**Technologies :** Python, Bash, R, neo4j, ponymorm, stan, GitLab, Docker

### [REDACTED] (Part Time) - 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, numpy, skimage, AWS, PostgreSQL

### [REDACTED] - Research Engineer April 2014 - Dec 2015

Developed processing pipelines and workflows to enable evaluator work for [REDACTED] programs  
Helped run professional trainings to disseminate new probabilistic programming languages  
Produced biannual quantitative and qualitative reports on for [REDACTED] and language developers  
Contributed to [REDACTED], [REDACTED], [REDACTED], [REDACTED]  
**Technologies :** Python, SLURM, Scala, [REDACTED], [REDACTED], Docker, Jira, Basecamp

## Neato Projects

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Topic modeling and applications, a presentation for non-statisticians	<i>beamer, TeX</i>
Workshop collaborative introduction to GitHub and slides	<i>markdown, bash, github.api</i>
Distributed Morphological Watershed Algorithms	<i>pyspark, numpy, ndimage, Python</i>
Distributed Fully Homomorphic Encryption System	<i>Hadoop, Sagemath</i>
Concurrent Elliptic Curve Cryptography Module	<i>Sagemath, Erlang</i>

## Education

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### University

Computer Science MSc

### Machine Learning

#### Courses :

Analysis of Sequences  
Artificial Intelligence  
Computing Ethics  
Deep Learning  
Image Processing  
Information Retrieval  
Problem Solving with Large Clusters

Natural Language Processing  
Machine Learning  
Machine Learning, Advanced Topics  
Signal Processing, Advanced Topics  
Signal Processing, Speech  
Univariate Statistical Analysis  
Statistical Methods

### University

Computer Science BS, Mathematics Minor

### Computer Science & Cryptography

#### Electives :

Abstract Algebra  
Artificial Intelligence  
Computer Architecture  
Computer Graphics  
Cryptography & Elliptic Curves  
Elementary Real Analysis

Functional Programming  
Homomorphic Encryption Systems  
Linear Algebra I/II  
Natural Language Processing  
Number Theory  
Ordinary Differential Equations