Philip [redacted] [redacted] [redacted]@protonmail.com [redacted]

https://github.com/[redacted]

Personal Statement

I am an adaptable engineer, whos work history spans 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	LaTeX	Git	Ticketing Systems

Work Experience

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, Java

[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 AHDH/ASD studies
- Acted as OSS and Securities lead, developing, training and enforcing best practices

Technologies : Python, Bash, R, neo4j, ponyorm, 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]
- 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

Topic modeling and applications, a presentation for non-statisticians	***beamer, LaTeX***
Workshop collaborative introduction to GitHub and slides	***markdown, bash, github.api***
Distributed Morphological Watersheding Algorithms	***pyspark, numpy, ndimage, Python***
Information Retrieval Cluster/Rank Demo Harness	***flask, numpy, nltk, sklearn, Python***
Distributed Fully Homomorphic Encryption System	***Hadoop, Sagemath***
Concurrent Elliptic Curve Cryptography Module	***Sagemath, Erlang***

Education

[redacted] University — **Machine Learning**

Computer Science MSc

[redacted] – present

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

[redacted] University — **Computer Science & Cryptography**

Computer Science BS, Mathematics Minor

[redacted]

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