

Personal Statement

I am presently a graduate student at Oregon Health and Sciences University. After completing my BS at Western Washington University, and my 4 years industry experience, I have developed strong interests in cryptography, statistical computing, and languages. I am a very quick study, as I have adopted a new programming language or tool-set in nearly every challenge I have taken on. My interest in teaching and writing has granted me strong communication skills, and solid background.

Language Experience :

★ Python	Julia	Scala, Figaro	Perl
Ada	R	C, C++, C#	TeX

Education

Oregon Health Science University**CSLU**

Non-Matriculated (Masters)
2016 - present

Courses :

★ Machine Learning	Analysis of Sequences
★ Information Retrieval	Univariate Statistical Analysis
★ Ethics of Machine Learning	Statistical Methods

Western Washington University**Computer Science**

Computer Science BS
Mathematics Minor
Sept. 2007 - June 2012

Courses :

Unix Software Development	Formal Languages/Automata
Windows Software Development	Programming Languages
Analysis/Design of Algorithms	Concurrent Programming
Linear/Non-Linear Data Structures	Computer Organization I/II

Elective Courses :

Homomorphic Encryption Systems	Computer Graphics
Cryptography & Elliptic Curves	Number Theory
Artificial Intelligence	Elementary Real Analysis
Natural Language Processing	Linear Algebra I/II
Functional Programming	Abstract Algebra

Honors and Related Activities

Comap Mathematical Modeling Competition (Meritorious Winner) - Top 10%	- Feb. 2012
Comap Mathematical Modeling Competition (Honorable Mention) - Top 30%	- Feb. 2011

Neato Projects

Gradient Descent on Arbitrary Degree Polynomials	Julia
Gene Data Breast Cancer Drug Predictor	R, caret
Sensor Systems and Light Pollution Course	aws, sklearn, scipy, PonyORM, Python
Dating a Band - Lyrics Release Date Classifier	javascript, Python
Distributed Fully Homomorphic Encryption System	Hadoop, Python
Concurrent Elliptic Curve Cryptography Module	Erlang, Sagemath
Analysis of Subordinating and Coordinating Conjunctions	R, Perl
AdaRailz Concurrent Model Train Control System	Ada
TwixT AI Agent and UI	Java
Fractal Art Generator & Image Manipulation Program	C#

Work Experience

- Independent** - **Contractor/Consultant** **Nov. 2015 - present**
C&W Energy
Authored educational material on light pollution's effect on economy, biology, and technology
Light classification engine, custom photo image processing tools, and mathematical models
Developed a memoizing database-interface for caching computationally expensive operations
ComScore **June 2016 - Sept. 2016**
Worked to support large, custom, memory mapped, data store for demographic analysis
PDXCodeGuild **June 2016**
Developed and taught introductory python course material for coding boot-camp
Melinae **March 2016**
Setup infrastructure in AWS to enable secure sustainable workflow for remote company
Provided hands on training in Python and R to industry professionals
Languages Used : Python, R, AWS, PostgreSQL, Perl, C++
- Galois Inc.** - **Research Engineer** **April 2014 - Dec 2015**
Contributed to PPAML, Overseas Voting Foundation, Safeware, Robot Fast Track
Developed technologies and workflows to enable evaluator work for DARPA programs
Produced biannual quantitative and qualitative reports on for DARPA and language developers
Participated in programs sharing new technologies to research and industry professionals
Languages Used : Python, Scala, Figaro, Chimp, Docker
- EMC² Isilon Storage** - **Software Development Engineer** **Dec. 2012 - July 2013**
Brought to schedule a lagging anchor release feature in approximately 5 months
Designed and developed password manager to support Data At Rest Encryption
Wrote unit tests using libcheck to attain > 80% code coverage
Languages Used : C, C++, Python, SQLite
- Computer Science Dept.** - **Mentors Program Director/Mentor** **Sept. 2009 - March 2012**
Provided safe environment for training and instruction of students and mentors
Ran student/faculty meetings to project future program responsibilities
Wrote comprehensive quarterly reports, and tools for automatic report generation
Languages Used : Ada, C++, Scheme, R