

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, probabilistic programming, 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	Figaro	Julia	ET _{EX}
Scala	Ada	C	

Education

Oregon Health Science University**CSLU**

Non-Matriculated (Masters)
2016 - present

Courses :

Analysis of Sequences	Statistical Methods
Univariate Statistical Analysis	Digital Signal Processing

Western Washington University**Computer Science**

Computer Science BS
Mathematics Minor
Sept. 2007 - June 2012

Core Coursework :

Unix Software Development	Formal Languages/Automata
Windows Software Development	Programming Languages
Operating Systems	Concurrent Programming
Analysis/Design of Algorithms	Computer Organization I/II
Linear/Non-Linear Data Structures	Object-Oriented Programming in C++

Elective Coursework :

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

Honors and Related Activities

Comap Mathematical Modeling Competition (Meritorious Winner) - Top 10%	- Feb. 2012
Pacific Rim Regional Collegiate Cyber Defense Competition (Fourth Place)	- March 2012
Comap Mathematical Modeling Competition (Honorable Mention) - Top 30%	- Feb. 2011

Neato Projects

Sensor Systems and Light Pollution Course	<i>sklearn, scipy, PonyORM, Python</i>
Dating a Band - Lyrics Release Date Classifier	<i>javascript, Python</i>
Probabilistic-Program Profiler and Evaluator Harness	<i>SLURM, PonyORM, Python</i>
Probabilistic WiFi Geolocation	<i>Figaro, Scala, Javascript</i>
Distributed Fully Homomorphic Encryption System	<i>Hadoop, Python</i>
Concurrent Elliptic Curve Cryptography Module	<i>Erlang, Sagemath</i>
Analysis of Subordinating and Coordinating Conjunctions	<i>R, Perl</i>
AdaRailz Concurrent Model Train Control System	<i>Ada</i>

Work Experience

Independent

- Contractor/Consultant

C&W Energy

Nov. 2015 - present

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