

Personal Statement

I am 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 programming languages. I am a very quick study, as I have adopted a new 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++	TeX

Education

Oregon Health Science University**CSLU**

Computer Science MSc
2016 - present

Courses :

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

Extra Carricular**MOOC/Bootcamp**

Coursera / EdX / Stanford Online
Hack Oregon

Courses :

Functional Programming in Scala	Agile Machine Learning
Applied Cryptography	PPAML Summer Program

Western Washington University**Computer Science**

Computer Science BS
Mathematics Minor
Sept. 2007 - June 2012

Electives :

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

Work Experience

Independent - Contractor/Consultant**C&W Energy****Nov. 2015 - present**

Authored educational material in light pollution 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

Neato Projects

Information Retrieval Cluster/Rank Demo Harness	<i>flask, gensim, Python</i>
Relivance Vector Machine with kernel and platt support	<i>Julia</i>
Sad Clown Research Group	<i>gh-pages, pelican, blog</i>
Sensor Systems and Light Pollution Analysis	<i>aws, sklearn, scipy, PonyORM, Python</i>
Gene Data Breast Cancer Drug Predictor	<i>R, caret</i>
Gradient Descent on Arbitrary Degree Polynomials	<i>Julia</i>
Probabilistic-Program Profiler and Evaluator Harness	<i>SLURM, PonyORM, Python</i>
Distributed Fully Homomorphic Encryption System	<i>Hadoop, Python</i>
Concurrent Elliptic Curve Cryptography Module	<i>Erlang, Sagemath</i>
Multilingual Analysis of Subordinating and Coordinating Conjunctions	<i>R, Perl</i>
AdaRailz Concurrent Model Train Control System	<i>Ada</i>
Fractal Art Generator & Image Manipulation Program	<i>C#</i>