http://probinso.dyn-o-saur.com

Personal Statement

I am currently a graduate student at Oregon Health and Sciences University, studying computer science with interest in image processing and machine learning. From my 5 years industry experience and BS at Western Washington University, I developed strong interests in cryptography, statistical computing, and programming languages. I have adapted to, and adopted a new or tool-set in nearly every challenge I have taken on. My interest in teaching and writing has also gained me strong communication skills.

Language Experience :

C, C++ * Python Julia ETEX Ada R Perl

Education

Oregon Health Science University

CSLU

Computer Science MSc 2016 - present

Courses :

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

Western Washington University

Computer Science

Computer Science BS, Mathematics Minor Sept. 2007 - June 2012

Electives :

Homomorphic Encryption Systems Cryptography & Elliptic Curves Artificial Intelligence Natural Language Processing Functional Programming

Computer Graphics Number Theory

Elementary Real Analysis

Abstract Algebra Linear Algebra I/II

Work Experience

- Research Engineer Fair Neuroimaging Lab

Oct. 2017 - present

Nov. 2015 - Oct. 2017

Supported research efforts studying developing brains, primarily in ADHD and ASD studies Contributed to data aggregation/processing pipeline for reported data and FMRI images Authored best practices material for managing contributors of varying computational levels Worked in teams under multiple institutional review boards

Languages Used: Python, Bash, LabKey

Independent C&W Energy USA

- Contractor/Consultant

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 data pipeline 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, Chimpy, 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

Relevance Vector Machine Julia Sensor Systems and Light Pollution Analysis aws, sklearn, scipy, PonyORM, Python R, caret Gene Data Breast Cancer Drug Predictor Splingr - Shamir Secret QR Sharing Python Probabilistic-Program Profiler and Evaluator Harness SLURM, PonyORM, Python Probabilistic WiFi Geolocation Figaro, Scala, Javascript Distributed Fully Homomorphic Encryption System Hadoop, Python Concurrent Elliptic Curve Cryptography Module Erlang, Sagemath Multilingual Analysis of Subordinating and Coordinating Conjunctions R, Perl AdaRailz Concurrent Model Train Control System Ada Java TwixT AI Agent and UI Fractal Art Generator & Image Manipulation Program C# Unix Shell С