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https://github.com/probinso

Personal Statement

I am currently a masters student at Oregon Health and Sciences University's Center for Speach Learning and Understanding, studying computer science with a focus in signal processing and machine learning. From my 5 years industry experience and BS at Western Washington University, I developed strong interests in cryptography, reproducable research, 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 :

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

Education

Oregon Health Science University

CSLU

Computer Science MSc 2016 - present

Courses :

* Digital Signal Processing
Problem Solving with Large Clusters
Image Processing
Machine Learning
Information Retrieval

Computing Ethics Statistical Methods Univariate Statistical Analysis Analysis of Sequences

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

Fair Neuroimaging Lab - Research Engineer

Oct. 2017 - Present

Contributed to workflows and analytics tools for studying Microbiome populations

Developed processing pipeline and audit tools for reported data and FMRI images

Project management guidelines, Git Czar, Release Review Manager, Team Security Representative

Languages Used : Python, Bash, R, neo4j

Independent - Contractor/Consultant

RGB Optics / C&W Energy USA

Nov. 2015 - Present

Provided live technology tutorials and consulting on optimization and image processing Authored educational material in light pollution on economy, biology, and technology Light classification engine, custom photo image processing tools, and mathematical models Developed a cloud 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 remote-first workflow Provided hands on training in Python and R to industry professionals

Languages Used: Python, R, AWS, PostgreSQL, Perl, C++

Galois Inc. - Research Engineer

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

April 2014 - Dec 2015

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

Sensor Systems and Light Pollution Analysis aws, sklearn, skimage, PonyORM, Python Morphological Watershedding Algorithms numpy, ndimage, Python Relevance Vector Machine Julia Information Retrieval Cluster/Rank Demo Harness flask, sklearn, Python N-Body Simulator SIUnits, Julia Splingr - Shamir Secret QR Sharing Python Probabilistic-Program Profiler and Evaluator Harness SLURM, PonyORM, Python Distributed Fully Homomorphic Encryption System Hadoop, Python Concurrent Elliptic Curve Cryptography Module Sagemath, Erlang Multilingual Analysis of Subordinating and Coordinating Conjunctions R, Perl AdaRailz Concurrent Model Train Control System Ada Fractal Art Generator & Image Manipulation Program C# Unix Shell С