

Philip Robinson

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

Personal Statement

My industry experience has exposed me to many fun technologies, fueling my 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. See my project details at <http://probinso.dyn-o-saur.com>.

Language Experience :

| | | | |
|----------|--------|-------|------------------|
| ★ Python | Figaro | Julia | ET _{EX} |
| Scala | Ada | C | |

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, 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 Course

sklearn, scipy, PonyORM, Python

Dating a Band - Lyrics Release Date Classifier

javascript, Python

Splinqr - 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

Analysis of Subordinating and Coordinating Conjunctions

R, Perl

AdaRailz Concurrent Model Train Control System

Ada

Liars Dice Game Server

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

Pacific Rim Regional Collegiate Cyber Defense Competition (Fourth Place) - March 2012

Comap Mathematical Modeling Competition (Meritorious Winner) - Top 10% - Feb. 2012

Comap Mathematical Modeling Competition (Honorable Mention) - Top 30% - Feb. 2011