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 programing, 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	Scala, Figaro	Julia	Scheme
⋆ Ada	C, C++, C#	Erlang	Java

Work Experience

Independent — **Contractor/Consultant**

C&W Energy — **Nov. 2015 – present**

- Authored material on light pollution's effect on economy, biology, and technology
- Developed lamp classification engine, photo-image analysis tooling, and mathematical models
- Provided hands on training to grow industry scientists in Python

Melinae — **March 2016**

- Setup infrustructure in AWS to enable secure sustainable workflow for remote company
- Provided hands on training in Python and R

Languages Used : Python, R, AWS, PostgreSQL

Galois Inc. — **Research Engineer** — **April 2014 – Dec 2015**

- Contributed to PPAML, Overseas Voting Foundation, Safeware, Robot Fast Track
- Developed techonologies 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

EMC^2 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, then wrote tools for report generation

Languages Used : Ada, C++, Racket, R

Neato Projects

Sensor Systems and Light Pollution Course	***sklearn, scipy, PonyORM, Python***
Spinqr – Shamir Secret QR Sharing	***Python***
Probabilistic-Program Profiler and Evaluator Harness	***SLURM, PonyORM, Python***
Probabilistic WiFi Geolocation	***Figaro, Javascript***
Cryptographic Distributed Virtual System Vectors	***LaTeX, Haskell***
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***
TwixT AI Agent and UI	***Java***
Fractal Art Generator & Image Manipulation Program	***C#***
Text-Based Adventure Game	***C++***
Unix Shell	***C***
Liars Dice Game Server	***C***
Petrographic Mineral Identification Database Design Documents	

Education

University

BS Computer Science, Western Washington University (WWU)
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

WWU Scholar's Week Poster Competition (Two Submissions)	- May 2012
Kryptos Cryptanalysis Challenge	- April 2012
Pacific Rim Regional Collegiate Cyber Defense Competition (Fourth Place)	- March 2012
Comap Mathematical Modeling Competition (Meritorious Winner) - Top 10%	- Feb. 2012
International Collegiate Programming Contest	- Nov. 2011
Comap Mathematical Modeling Competition (Honorable Mention) - Top 30%	- Feb. 2011
William Lowell Putnam Competition	- Dec. 2010
WWU ACM Programming Competition (First Place)	- Jan. 2010
WWU Computer Science Distinguished Scholar Award	- Sep. 2007