Simon J. Hajjar

Work Experience

Zenefits – Security Engineer

January 2016 - April 2016: San Francisco, California

- Protected a Django website from attacks such as CSV injections, cross-site scripting and request forgery
- Researched various attacks on the company's applications in order to find security exploits
- Created internal infrastructure to hide sensitive company information from other employees

The Hospital for Sick Children – Computational Genomics Developer

May 2015 - August 2015: Toronto, Ontario

- Created pipelines for processing the Ewing's sarcoma genome using Python and C++
- Developed optimizations for algorithms used to locate structural variations in somatic genomic data
- Invented graph theory algorithms to find novel mutations in cancer genomes

OptimalMRM Advisors Inc. – Full Stack Developer

May 2013 - August 2013: Toronto, Ontario

- Coded financial simulations in Java using Monte Carlo methods
- Implemented front-end design specifications using HTML, CSS and JavaScript

Kira Talent – Full Stack Developer

May 2012 – August 2012: Toronto, Ontario

- Created and developed a Diango website for hosting live video calls with three coworkers
- Worked on tasks ranging from implementing a comment system for videos, to integrating social networks such as LinkedIn

Side Projects

Krypton - github.com/Xenonstory/Krypton

An implementation of cryptographic standards including various ciphers, hashes, message authentication codes, and pseudorandom number generators, written in C

Grandmaster – github.com/Xenonstory/Grandmaster

The game of chess in C++. A current work in progress, with the end goal being an AI that has a FIDE rating of at least 1400

Elope – github.com/Xenonstory/Elope

An implementation of the ELO rating system, created with a friend in order to teach him how to program in Python

Mandelbrot - github.com/Xenonstory/MandelbrotFractal

An application that generates the Mandelbrot fractal, with zooming capabilities, written using Java

Education

University of Waterloo - September 2014 - Present

- Candidate for Bachelor of Honours Computer Science with 87% cumulative average
- Expected Graduation: April 2019

Awarded scholarships include:

2016: Scott Kelsey Fevreau Memorial Scholarship

2015: Sameer Ahuja Perseverance Award

2014: Egan Scholarship in Computer Science

2014: UW President's Scholarship of Distinction

Languages and Technologies

- Advanced knowledge of Python and C
- Experience with C++ and Scheme
- Proficient in UNIX and associated shell
- Thorough knowledge of Django web framework
- Extensive experience with Git
- Working knowledge of various languages such as HTML, Processing, JavaScript and Java

Additional Experience

- Worked as a teaching assistant for MATH 137 Calculus 1 for Honours Mathematics (2015)
- Regularly compete in hackathons such as LAUNCH (San Francisco 2016), HackTheNorth (Waterloo 2015), UofTHacks (Toronto 2015), HackDuke (North Carolina 2014), and MHacks (Michigan 2014)
- Constantly self-learning through online resources, having completed online course such as Stanford's "Introduction to Cryptography" and MIT's "Introduction to Algorithms"
- Valedictorian for graduating class of De La Salle College (2014)