DANIEL CONNELLY

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EDUCATION

Portland State University

Master of Science in Computer Science, G.P.A: 3.74 *January 2019 - March 2020*

- Graduate Courses: Cybersecurity, Blockchain Development & Security, Artificial Intelligence, Machine Learning, Operating Systems, Data Structures & Algorithms, Programming Languages

Grad-prep Computer Science, G.P.A: 3.6 *January 2018 - January 2019*

Bachelor of Science in Psychology, G.P.A: 3.82 *October 2017 - January 2018*

OBJECTIVE

I am interested in Software Development, Software Engineering, or anything that touches the software lifecycle really. Courses and projects have taught me varying disciplines that have equipped me to be a good Software Engineer. Namely, graduate courses in Networks, Operating Systems, Programming Languages, Blockchain, and others. I enjoy unique problems and solving them with varying languages such as Java, C, C++, and Python.

PROJECTS

Capstone Sponsor *Spring 2020 - Present*

• Applicant sponsor for an Agile team of 5-6 students to work on an automated bug submission software.

Digital Registry of Vulnerable Ethereum Programs *June 2019 - Present*

• Employed exhaustive Symbolic Execution over ≈ 1.7 million programs, finding $\approx 800,000$ of them to contain security vulnerabilities.

• Utilized Python for scripting and programming, Docker for isolation of containers, Linux for its easy infrastructure, and Git for version control.

• Co-built a React app and Go server to intake HTTP and MySQL database requests. Setup and managed DNS configuration and SSL certification of a public facing website which was deployed to Google App Engine and later hosted on a Google Compute Engine instance.

Email and Text Notification *March 2020 - Present*

• Porting a Bash script to Python which is capable of sending emails, texts, attachments, alerts when a program finished, and digitally signing emails.

• Increased feature set by approximately 5 (config option, multiple operating system compatibility...).

Password Cracking *April 2019*

• Cracked 60 salted passwords by using the C library SHA1 hash of a dictionary of words with salts.

• Experimented with other hashing techniques and encryption algorithms (e.g., RSA, HMAC, MD5).

TECHNICAL SKILLS

Programming Languages C, C++, Java, Python, Solidity, JavaScript
Operating Systems Linux, Windows, Mac
Other Skills Git, Google Cloud Platform (GCP), Amazon Web Services (AWS), SQL, MySQL, PostgreSQL, Docker, Trello, Travis CI, Continuous Integration (CI), Continuous Deployment (CD),

WORK EXPERIENCE

Portland State University *September 2019 - March 2020*
Graduate Research Assistant

- $10,000 in total grants: $5,000 Google Cloud Grant, $5,000 Portland State University Grant.
- Research and present a thesis on the current state of security for Ethereum Smart Contracts.
- Secure software development included the use of C/C++ in running API calls to gather data.

Portland State University *September 2019 - January 2020*
Computer Science Tutor

- Tutor 10-15 lower-division students per week in object-oriented programming, discrete structures, and x86 assembly to improve academic performance.
- Help students in debugging, troubleshooting, and designing assignments in C, C++, and Java.

CERTIFICATIONS, AWARDS, PUBLICATIONS, VOLUNTEERING

SoloLearn Programming Language Certifications: C, C++, Java, Python, SQL *March 31 2020*
Google Cloud Research Grant: $5,000 *September 2019*
Portland State University/NSF Grant: $5,000 *September 2019*
MS Thesis: *Smart Contract Vulnerabilities on the Ethereum Blockchain: A Current Perspective* May 11 2020
Women in Computer Science (WiCs): Member/Mentor *September 2019 - March 2020*
Association of Computer Machinery (ACM): Treasurer *December 2018 - 2019*
BS Thesis: *Delays in Treatment: A Literature Review of Pathways to Treatment for Psychosis* January 1 2018
Honors College Graduate (BS): Magna Cum Laude *January 2018*