

DANIEL CONNELLY

Portland, Oregon

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WORK EXPERIENCE

Liftoff LLC CEO

April 2020 - Present

- Hiring talented students to give them the opportunity to gain skills on real-world projects; often needed for entry-level basis requirements.
- Developing project ideas and assigning them to students and student teams.
- Managing marketing outreach to those in need of student created services.

Portland State University Graduate Research Assistant

September 2019 - March 2020

- \$10,000 in total grants: \$5,000 Google Cloud Grant, \$5,000 Portland State University Grant.
- Published conference paper in the Lecture Notes in Computer Science (LNCS) (2020)
- 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 Computer Science Tutor

September 2019 - January 2020

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

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

- Tracks: Software Engineering, Systems & Networking

Bachelor of Science in Psychology, G.P.A: 3.82

October 2017 - January 2018

TECHNICAL SKILLS

Programming Languages C, C++, Java, Python, Solidity, Bash, Sh, jQuery, Node.js, Express.js, JavaScript

Operating Systems Linux, Windows, macOS

Other Skills Git, Google Cloud Platform (GCP), Amazon Web Services (AWS), SQL, MySQL, PostgreSQL, Docker, Trello, Continuous Integration (CI), Travis CI, Continuous Deployment (CD), Jupyter Notebook, RPi, GDB, Fish

PROJECTS

Capstone Sponsor

March 2020 - Present

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

Email and Text Notification

March 2020 - Present

- Porting a Bash script to Python, which is capable of sending emails, texts, attachments, alerts when a long running job has finished, and digitally signing emails.
- Increased feature set by 5: OOP, a config option, multiple operating system compatibility, modularized code, etc.

Digital Registry of Vulnerable Ethereum Programs

June 2019 - Present

- Employed exhaustive Symbolic Execution over 1.7 million programs, finding almost 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.

Password Cracking

April 2019

- Cracked 60 salted passwords by using the OpenSSL SHA1 hash in C of a dictionary of words with salts.
- Experimented with other hashing techniques and encryption algorithms (e.g., RSA, HMAC, MD5).

PUBLICATION REVIEWS

Have I Been Exploited?: A Registry of Vulnerable Ethereum Smart Contracts"

August 2020

- **Reviewer 1:**...the engineering work documented here is non trivial and the service described is essential for the use of general public and much needed...this reviewer praises the engineering effort and recommends continuing it to add more engines and other features."
- **Reviewer 2:**"...promising future directions to share known vulnerabilities with users...The paper is well written, and the proposed project is an interesting idea with a good potential impact."

CERTIFICATIONS, AWARDS, PUBLICATIONS, VOLUNTEERING

Accepted paper in the *International Conference on Blockchain (ICBC)*:

August, 2020

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

Graduate Student Organization (GSO): Member/Mentor

December 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