(720)-227-7014

Fisher Darling

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EDUCATION

Colorado School of Mines

Golden, CO

B.S. Computer Science; GPA: 3.45

Expected May 2021

Coursework: Data Structures, Algorithms, Operating Systems, Compilers

EXPERIENCE

• Verizon (ProtectWise)

Denver, CO

Sofware Engineering Intern

Aug 2019 - Present

- Write fully asynchronous and multi-threaded software for analyzing and capturing network packets to build the next generation of Intrusion Detection Systems.
- Implement system metrics for analyzing the health of deployed software to bring more value to clients.
- Develop open source code that expands the Rust ecosystem.
- Participate in weekly Agile standups and groomings.

• ProtectWise

Denver, CO

Product Engineering Intern

Oct 2018 - May 2019

- Trained team members in the Rust Programming language. This included researching libraries needed for our product and pair programming with senior engineers to teach them Rust paradigms.
- Implemented a multi-threaded, asynchronous packet capturing library using AF_PACKET C bindings. These bindings were then used in production code to act as input for our packet analysis engine.
- Created tooling for debugging local instances of production code.

• Colorado School of Mines

Denver, CO

Secure Robotic Systems Research Assistant

Aug 2018 - May 2019

- Presented on different adversarial machine learning attack methods, such as FGSM and JSMA.
- Documented and prepared minutes for the secure robotics systems research group meetings.
- Read and summarized research papers in Adversarial ML.

Projects

• WABI – WebAssembly Binary Interpreter

Rust

- Developed a WebAssembly virtual machine and runtime true to the WebAssembly v1.0 specification to learn about virtual machines and their architectures.
- Cloud VPN Infrastructure

Rust, Docker, Microservices

• Constructed a microservice infrastructure that dynamically creates secure VPNs on the Digital Ocean Cloud.

ACTIVITIES & AWARDS

• 1st Place, Facebook Global Hackathon

2018

- HypAR Maps: A completely offline Indoor Navigation System using ARCore and Kotlin.
- $\circ~$ Wrote the system for determining an image's transformation matrix.
- Qualified at MHacks 2018: Facebook Best Social Good Hack, Google Best Use of Google Cloud Platform.

• 2nd Place, HackUTD

UoT@Dallas, 2019

- HealthcAir: Travel application that combines travel with cheap, overseas medical operations.
- Created an API that the backend queries for healthcare data.

• 2nd Place, CyberPatriot IX National Finals

2017

- Used Linux system hardening and networking skills to remove security vulnerabilities in user systems and servers.
- Founder and President of OreSec Mines CyberSecurity Club

2019

- Host and lead weekly meetings on CyberSecurity topics.
- Present on Web Exploitation, Cryptography, Fuzzing and Binary Exploitation.
- Grew membership to over 40 members.

SKILLS

• Languages: Rust, Python, C, Java, C++, German B2 Technologies: Git, Unix/Linux, Docker, AWS, GCP