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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, Algorithims, Operating Systems, Compilers

Experience

- **Verizon (ProtectWise)** Denver, CO
  Sofware Engineering Intern *Aug 2019 – Present*
  - Writing fully asynchronous and multi-threaded software for analyzing and capturing network packets to build the next generation of Intrusion Detection Systems.
  - Implementing system metrics for analyzing the health of deployed software to bring more value to clients.
  - Developing open source code that expands the Rust ecosystem.
  - Participating 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 pair programming with senior engineers in order to teach them Rust paradigms and researching libraries needed for our product.
  - 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
  - Documenting and taking 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.
  - The purpose of this project is to learn more 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
  - Wrote the system for determining an image's transformation matrix.
- *2nd Place*, **HackUTD** UoT@Dallas, 2019
  - **HealthCair**: Travel application that combines travel with cheap, overseas medical operations.
  - Created an API that our backend queries for healthcare / operation 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
  - Hosting and leading weekly meetings on CyberSecurity topics
  - Gave presentations on Web Exploitation, Cryptography and Binary Exploitation
  - Grew membership to over 40 members

Skills

- **Languages**: Rust, Python, C, Java, C++ **Technologies**: Git, Unix/Linux, Docker, AWS