Emily Miller

EDUCATION

University of Edinburgh

September 2024 - June 2028 BSc Computer Science and Mathematics (Hons)

Tarrant County College

May 2022 - June 2024 Dual Credit Program

EXPERIENCE

Textron, Internship— IT Co-Op, Cloud Operations

May 2023 - August 2024 (Part-Time, Avg. 25 hrs/week)

- Developed enterprise firewall change request process to streamline firewall changes in ServiceNow. Integrated with 7 business units and 3 vendors, impacting over 350 tickets.
- Improved various operational processes through automation including assisting in developing our VM modification and decommission processes by implementing, testing, and pushing 17 change requests through to production.
- Integrated with the Azure Service Bus REST API to automate implementation of operational readiness reviews (ORRs).

Textron, Internship— IT Intern, Cybersecurity Engineering August 2022 - May 2023 (Part-Time, Avg. 20 hrs/week)

- Developed Python programs for OSINT and attack surface discovery in response to incidents, improving threat intelligence.
- Worked with our Security Operations Center (SOC) to develop new endpoint and server security controls in response to Red Team exercises.
- Managed our Splunk SIEM instance, working directly with the Cyber Incident Response Team (CIRT) to enhance alerting mechanisms for improved incident detection.
- Applied Databricks and Python to develop an ETL pipeline between our Azure Data Lake and Splunk, optimizing data integration and analysis.

Edikt Studios, Internship — Software Development

September 2021 - May 2022 (Part-Time, Avg. 8 hrs/week)

- Used Unity and C# to develop a VR based real time strategy game.
- Leveraged SCRUM, GitHub, and Jira for project management.

PROJECTS

3D Rendering Engine—Application

C. SDL

- Parses STL and OBJ file formats.
- Perspective projection using Affine transformations.
- Rasterization algorithms like Bresenham's line drawing algorithm and scanline.

emily@emilymiller.xyz @python151 on GitHub

PROGRAMMING LANGUAGES

Python (Advanced)

C (Advanced)

Javascript (Advanced)

Rust (Intermediate)

X86 Assembly (Intermediate)

SQL (Intermediate)

TOOLS & TECHNOLOGIES

IDA Pro

Wireshark

Virtualization

Linux System Administration

SECURITY SKILLS

Malware Analysis

Binary Exploitation

Software Packing and Obfuscation

Defense in Depth

RELEVANT COURSEWORK

Intro to Computation (Haskell)

Intro to Data Science (R)

Linear Algebra

Programming II (C++)

Introduction to Relational Databases (SQL)

C Programming

SOFT SKILLS

Collaborative Team Experience

Strong Communication and Presentation Skills

Proven Success in Public Speaking Competitions