Caitlin Coffey

ccoffey@olin.edu • caitlincoffey.com • linkedin.com/in/ccoffey1

Education

Bachelor of Science in Electrical and Computer Engineering, May 2023, GPA: 3.98/4.00
Franklin W. Olin College of Engineering, Needham, MA

- Recipient of a 4-year, 50% Olin Merit Scholarship
- **Relevant coursework:** Software Systems, Computer Architecture, Data Structures and Algorithms, Machine Learning, Cryptography and Cryptography Applications
- **Clubs:** Public Interest Technology, Olin Conductorless Orchestra, Society of Women Engineers

Work Experience

Capital One, McLean, VA
Cyber Technical Associate   08/2023-Current

- Conduct extensive code reviews and threat models for technical products across all lines of business.
- Automate Quality Assurance testing for threat models using JavaScript and Google App Scripts.

The Johns Hopkins University Applied Physics Laboratory, Laurel, MD
Cyber Reverse Engineering Intern   06/2022-08/2022

- Utilize Ghidra, Wireshark, Frida, GDB, and QEMU to find vulnerabilities in firmware and develop exploits.
- Build and develop automated data collection scripts in Python, Bash, and C.

The MITRE Corporation, Bedford, MA
Data Science & Network Security Intern   05/2021-08/2021

- Design, analyze, and publish an automated data processing pipeline using Apache Airflow & Apache Spark.
- Research and build recurrent neural network models in Python using TensorFlow, Keras, and Scikit-learn.

Qualcomm Inc., Boxborough, MA
Software Engineering Intern   05/2020-08/2020

- Automate and parallelize GPU performance verification tests using Python and multiprocessing libraries.
- Create a software tool to analyze GPU performance in Python using Matplotlib, NumPy, and Pandas.

Olin College of Engineering, Needham, MA
Software Design, Modeling and Simulation, & Software Systems Teaching Assistant   09/2020-05/2023

- Assist in teaching memory management, network protocols, & operating systems in C/x86 Assembly.
- Analyze and debug extensive data models in Python and MATLAB.

Volunteer Experience

Women without Borders, Vienna, Austria
Software Developer   1/2022-05/2022

- Build, test, and maintain HTML, CSS, and JavaScript code for an international non-profit website.

Relevant Skills

Python – Object-oriented programming, artificial intelligence (image processing, natural language processing).

C, C++, Assembly - Reverse engineering, object-oriented programming, embedded systems programming, device emulation, firmware modification (in ARM, x86).

Linux – Shell scripting, container development with Docker, version-control management with Git.