Aidan Sprague



Cleared Computer Science senior with two years of hands-on experience in software development and reverse engineering. Seeking a full-time position starting Fall 2023.

EDUCATION

B.S. Computer Science, Minor in Human-Computer Interaction Virginia Tech

May 2023

Blacksburg, VA

GPA: 3.84 / 4.00

Dean's List: Fall 2019 - Spring 2022

EXPERIENCE

Software Engineer Intern II (Co-op), AnaVation LLC | Remote

May 2022 - December 2022

- Held active Top Secret (TS) security clearance with Counterintelligence (CI) polygraph exam
- Assisted mission-critical customers though reverse engineering efforts on mobile platforms and automating the Extraction, Transformation, and Load (ETL) of data into various platforms using Python

Project Manager, Design Build Fly at Virginia Tech | Blacksburg, VA

May 2021 – May 2022

- Oversaw a student-led engineering design team tasked with creating fixed-wing RC drones for international competition
- Raised and allocated \$20,000+ in funding through corporate and private sponsorships used in areas such as materials, software, marketing, outreach, and competition
- Managed 15 sub-team leads and 80+ members for smooth operation and successful competition
- Manufactured 5 aircraft and facilitated 15 test flights during the course of the year
- Placed 5th out of 97 teams internationally in both design report and flying proficiency

Software Engineer Intern I, AnaVation LLC | Remote

May 2021 – August 2021

- Designed an aggregate data lake of real-time cryptocurrency blockchain transactions (Bitcoin, Dogecoin, Litecoin, and more) using Python and MongoDB
- Created a three-part Remote Access Tool (client, server, operator) capable of covert reconnaissance and offensive control of a target machine using Java, Python, Shell Scripting, and SQLite
- Enhanced proficiency in AWS, computer networking, and cybersecurity

Undergraduate Teaching Assistant, VT CS Department | Blacksburg, VA

January 2021 – May 2021

- Assisted over 300 students with coding related questions and projects through Zoom Office Hours
- Answered daily student questions posted to the online course forum board
- Met routinely with course professors to adapt and improve remote teaching techniques

PROJECTS

Personal Web Server | Languages: C

December 2021

- Created a multi-threaded web server utilizing a custom-built thread pool implementation
- Features an HTTP API, cookie issuance, user profile authentication, and mp4 buffering
- Tested successfully with a React.js frontend

Customized Shell | Languages: C

September 2021

- Created a custom shell (similar to BASH) utilizing posix spawn to load and execute child processes
- Features job handling (foreground & background), signal sending / catching, exclusive-access programs (i.e., vim), ability
 to change directories, and customizable prompt

TOOLS

Gitlab, GitHub, Atlassian (Jira, Confluence, Bitbucket, Bamboo), Eclipse, PyCharm, Visual Studio, VS Code, Android Studio, XCode, Unity, AWS, Docker, WordPress, Frida, Ghidra, Hopper, SQLCipher

LANGUAGES / DATABASE MANAGEMENT

Python, Java/Kotlin, C, C#, JavaScript, Swift, MATLAB, BASH/Shell, HTML/CSS, x86, MIPS, MySQL, SQLite, MongoDB