Isaiah Duhart

isaiah.duhart.1@gmail.com | linkedin.com/in/isaiah-duhart/ | (808) 778-9774 | Alexandria, VA

EDUCATION

Virginia Tech   **Expected Graduation: May 2025**

B.S. in Computer Science   Blacksburg, VA

- GPA: 3.31

TECHNICAL SKILLS

Tools and Frameworks

- Linux, Ghidra, Spring Boot, REST API, Git, Jira, Android

Programming Languages

- C#, Java, C, Python, Kotlin

EXPERIENCE

Central Intelligence Agency   **September 2023 – August 2024**

- TS/SCI security clearance with a full scope polygraph   Langley, VA

Software Engineering Intern, DDI/Center for Cyber Innovation   May 2024 - August 2024

- Maintained python framework to support close access cyber mission and to allow external development teams to create tools within the framework
- Developed proof-of-concept framework plugin that automatically ingests packet captures (PCAPs) taken by the framework into an external tool that provides a webpage interface for easier PCAP analysis, especially for non-technical users
- Demoed tool updates to users in order to refined project requirements and gather feedback
- Updated process for validating JavaScript Object Notation (JSON) input for tools within the framework to allow for validation of custom JSON types

Software Engineering Intern, DDI/Center for Cyber Innovation   January 2024 - May 2024

- Developed a self-loadable Linux-kernel-based rootkit that provides process, file, and network hiding, paired with a user-space "orchestrator"
- Created API-like relationship between "orchestrator" and rootkit to authenticate users and pass requests and responses between kernel and user-space
- Collaborated with users to gather and prioritize rootkit requirements, while providing regular demos of tool progress

Software Engineering Intern, DST/Humint Technology Office   September 2023 - January 2024

- Developed Windows forensic solution to programmatically collect USB and network information from a device
- Interfaced with stakeholders to add a feature that highlights USB storage devices found on a device that are not on a configurable whitelist
- Created automation tests that modify a registry backup using batch scripts in order to streamline developer testing of all registry-focused tools
- Composed documentation describing information collected from each registry key, and other useful keys that could be collected in further development

CapTech   **May 2023 – August 2023**
Software Engineering Intern   Richmond, VA
- Worked on a team of 10 developers to create an airline website, backend api, chat bot, and relational database
- Formulated custom SQL queries to support flight search functionality, resulting in 3x speed up in lookup flight time compared to commercial airlines
- Developed REST API in Spring Boot that accessed, stored, and manipulated data in an AWS-EC2 hosted SQL database
- Implemented account authentication using Spring Security to provide users with personalized and secure accounts
- Clearly communicated backend development to clients in order to capture updated requirements and feedback

Software Assistance Triage (SWAT)   **September 2021 – May 2023**
SWAT Technician, College of Engineering   Blacksburg, VA
- Conducted IT support for College of Engineering students and staff
- Implemented a loaner system by creating images for bulk loans that require specific software
- Built office knowledge base to guide future employees, and trained them on the ticketing and loaner systems

ACTIVITIES

National Society of Black Engineers (NSBE)   **September 2021 - Present**
Technical Outreach Community Help Chair (TORCH)   Blacksburg, VA
- Expanding the TORCH program at Virginia Tech by leading tutoring sessions for middle and high schoolers, and creating volunteer opportunities for our college member body to support the community
- Collaborating with VT NSBE's Pre-College Initiative to plan and coordinate monthly events outreach events for black middle and high schoolers to engage with engineering disciplines
- Managing outreach events to stimulate K-12 minority students' interest engineering disciplines
- Translating complex engineering principles to easy to understand programs for middle and high schoolers

Galipatia   **September 2021 - May 2023**
Peer Mentor and Upper Class Leader (UCL)   Blacksburg, VA
- Mentored group of 14 students to support them through their first year of college
- Collaborated with Service Learning Committee members to create volunteer opportunities for freshmen within the New River Valley