MALCOLM GILMORE

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Embedded Systems & Software Engineer

EDUCATION

BACHELOR OF ELECTRICAL ENGINEERING W/ MINOR IN COMPUTER SCIENCE

Morgan State University Baltimore, MD

RELEVANT EMPLOYMENT

VOLUNTEER INSTRUCTOR August 2022 - August 2023

Black Cybersecurity Association Baltimore MD

- Created and taught IT and Computer Networking courses at the Black Cybersecurity Association community center. Courses were free and designed to prepare applicants for the COMPTIA A+ and Network+ certifications.

QUALITY ASSURANCE TECHNICIAN Jun 2022 - Sep 2022

B2B Mobile Auction Pikesville MD

- Conducted thorough software testing, identifying and documenting critical bugs. Managed inventory through Microsoft Excel, detailing product conditions, establishing a more efficient QA process, enhancing product quality and user satisfaction as well as increasing resale value.

SOFTWARE ENGINEER Apr 2021 - May 2022

Johns Hopkins APL Laurel MD

- Developed a web application powered by system dynamics modeling to unify scientists and engineers, facilitating seamless communication and collaboration between disciplines.

FIRMWARE VALIDATION ENGINEERING INTERNSHIP May 2019 - Aug 2019

Intel Corporation Folsom CA

- Collaborated with technicians to create a customized GUI application for firmware validation testing on 3D NAND-based SSDs and SSHDs, optimizing testing efficiency and accuracy as well as uncovering critical bugs and boosting system reliability. Also developed PowerShell scripts to automate firmware version parsing and downloads, streamlining update processes while using WinDbg to ensure software cohesion.

EMBEDDED SYSTEMS ASSISTANT May 2019 - Aug 2019

Crosswire Studios Sacramento CA

- Collaborated with an escape room startup to develop interactive software for traps and puzzles using the Raspberry Pi platform, enhancing the immersive experience. I worked with them during my intel internship.

APPLICATIONS ENGINEERING INTERNSHIP May 2018 - Oct 2018

Northrop Grumman Corporation

- Served as a Systems Administrator and Computer Technician in the company's Enterprise Services division, utilizing BASH scripting and Python to automate server processes and enhance operational efficiency.

PROJECTS

RESEARCH/PROJECTS

• openDrop: Built a star topology drone delivery network with a dedicated web application capable of delivering payloads to unobstructed locations. Built one drone to test the platform.

GITHUB FOR PROJECT: https://github.com/thegtabot/DeliveryDrone

• Baltimore CharmCard Exploit: Whilst working in the WiNets Cybersecurity Research lab, conducted research regarding the duplication of MiFare Plus X RFID tag cloning which enabled CharmCards to be exploited.

• LSI Lunar Base Initiative: Worked with JHU APL to build a system dynamics model that establishes relationships between focus groups as well as subsystems within the lunar base.

SKILLS

Linux *(Very Experienced)*, OSX *(Skillful)*, Windows *(Expert)*, Python *(Very Experienced)*, Javascript *(Beginner)*, C++ *(Skillful)*, C *(Beginner)*, Java *(Skillful)*, BASH *(Very Experienced)*, PowerShell *(Experienced)*, CSHELL *(Experienced)*, Computer Networking *(Experienced)*