



Profile

Collaborative, flexible, results-oriented computer science graduate with excellent technical skills and exceptional written and verbal communication skills. Persuasive public speaker with demonstrated success working in diverse groups to use technology to solve real-world challenges.

Education

University of Georgia Honors College, Phi Beta Kappa Honors Society

- *Master of Science, Computer Science*- Graduation expected in December 2022 (current GPA: 4.0)
- *Bachelor of Science, Computer Science*- December 2021, Summa Cum Laude (GPA: 3.9)

Technical Skills

- **Languages:** (Proficient) Java, Python, C++, C (Intermediate) x86Assembly, JavaScript, MIPS
- **Frameworks / Technologies:** Django, Flask, Node.js, MongoDB, R, MATLAB, SQL, HTML, CSS, IDA, Ghidra, Wireshark, PyTorch, sklearn
- **Software / Licenses:** Git, Maven, HAM Radio Technician (KO4PLI)

Professional Experience

Booz Allen Hamilton – Cyber Intern, National Security Group

Malware/Reverse Engineering Team

Summer 2021

- Developed a multi-faceted malware analysis tool leveraging machine learning, public malware analysis services, and Ghidra script. Integrated the tool into an easy web application that lowers the barrier of entry for new analysts and optimizes workflow for experts.
- Presented solution to senior executives, winning First Place in the *Summer Games* competition.

Malware/Reverse Engineering Team

Summer 2020

- Developed a framework of command-line tools for malware triaging, tagging, and analysis. Tools included a twitter scraper, a Slackbot, and a Random Forest machine learning model.

University of Georgia Small Satellite Research Laboratory

October 2020 – January 2022

Team Lead & Team Member

- Direct and oversee flight software testing and other system tests of readiness for the Multiview Onboard Computational Imager (MOCI) 6u cubesat. Focused on automating command-and-control via REST API's.

University of Georgia Visitor Center

Tour Leader & Front Desk Team Member

November 2018 – Present

Research & Projects

MalDash Malware Analysis Tool

August 2021- Present

- Network Traffic analyzer integrated using the Flask Webserver which triages encrypted network comms.

Building Differentially Private CNNs While Preserving Accuracy

January 2022 - Present

- Differentially private ResNet18 trained on CIFAR10 dataset. Achieved up to 64% test accuracy.

Personal Website Portfolio

October 2020 - Present

- Visit joshmessitte.dev to see more of my work and interests. Built using HTML/CSS and JavaScript.