# **Zachariah Osman**

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## Summary

Computer science student with experience in application development, deployment, and maintenance. Agile, creative, and always excited to learn and discover new technologies, methods, and algorithms.

Areas Of Interest: Artificial Intelligence, Adversarial Reinforcement Learning, Computer Graphics, Low Level Computing, Cyber Security, Reverse Engineering, Distributed Systems

## **Skills**

**Programming Languages -** JavaScript (ES6/ES7), Python (Numpy, Scipy, Jupyter), CommonLisp, Java, ANSI C89, Assembler: x86-64, MIPS

**Software Tools -** React, React Native, Redux, KoaJS, TypeScript, Git, Bash, Zsh, NodeJS, GNU Make **Operating Systems -** Arch Linux, Aperture Linux, Manjaro, macOS, Debian, Ubuntu, Windows 10

## Experience

U.S. Naval Research Laboratory - Adversarial Malware Machine Learning Research Intern May 2021 - August 2021

- Researched multiple methods of creating Adversarial Malware samples capable of evading Malware Classifier.
- Machine Learning Research on identifying and evading Static PE Machine Learning Classifiers.
- Reinforcement Learning and Genetic Optimization approaches to creating Adversarial Malware.

### **Activision Publishing Inc - Software Development Intern**

May 2020 - August 2020

- Worked as a member of the Online Tools team, specializing in an event manager.
- Refactored and improved multiple aspects of the building and testing pipeline.
- Implemented and redesigned multiple frontend aspects to be more usable by clients.
- Using React and Redux, implemented methods for users to verify production changes were applied, saving users time.

#### Remine Inc - Software Development Intern

May 2019 - August 2019

- Worked on a React/Redux frontend with a TypeScript, NodeJS, and KoaJS backend.
- Implemented multiple new feature flows and designs following product specifications, into the core application.
- Improved usability and performance with multiple fixes across the core web application, improving user satisfaction.
- Collaborated with the support team to resolve user issues.

#### Remine LLC - Software Development Intern

May 2018 - August 2018

- Developed as a core member of the Mobile Team, created an app written in JavaScript using React Native.
- Worked closely with the User Experience team to implement multiple new features and improvements.
- Designed and Implemented CI pipeline to improve application and deployment stability.
- Worked on backend to implement endpoints required by the mobile app.

#### Blast Audio Inc- Software Development Intern

May 2017 - August 2017

### Education

#### George Mason University - Volgenau School of Engineering

Expected 2021

Computer Science, B.S

Related Courses: Computer Vision, Introduction to AI, Digital Electronics, Data Structures, Operating Systems

# **Projects**

Aperture Linux - https://aperturelinux.org

An Arch Linux based Linux Distribution, created for personal use and experimentation of various Arch packages.

References available upon request