Ian Fox

♦ whatthefox.dev iansfox@pm.me iansfox iansfox

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Honours Computer Science GPA: 3.4/4.0

June 2020

SKILLS

O Programming Languages: Python, Golang, Rust, C

O Technologies: Various Large Languate Models and Large Multimodal Models, Kubernetes, Docker, Linux

EXPERIENCE

Omny Security Oslo, NO

Security Researcher Oct 2021 - Current

O Developed document parsing tools using OpenCV, GPT4V.

O Assessed and remedied vulnerabilities with Omny's LLM-based chat agent.

O Created demonstrations of simulated ICS environments and attacks against them.

O Wrote and delivered talks at DEFCON ICS Village, BSides Oslo, S4x2023.

Splunk Waterloo, CA

Cloud Security Engineer

Jul 2020 - Sept 2021

O Developed and maintained automation for various security processes such as vulnerability scanning.

Worked with stakeholders to plan and deliver enhancements to the vulnerability reporting process.

 \circ Delivered webinar on using terraform to manage firewall rules with Signal Sciences

Cognite AS. Oslo, NO

Software Development Co-op

Sep 2019 - Dec 2019

O Implemented new authentication mechanism using Hashicorp's Vault.

 $\ \ \bigcirc$ Fixed security vulnerabilities related to authorization.

Splunk Inc. San Jose, US

Software Engineering Co-op

Jan 2019 - Apr 2019

- Designed and developed integrations between GitLab CI and static code analysis tools, streamlining developer workflow.
- O Built systems to automate tool deployments for the Product Security team.
- Created and delivered training on CI best practices.

Oath Inc. Sunnyvale, US

Technical Intern Jan 2018 - Aug 2018

- O Designed, implemented, and open sourced the yFuzz fuzzing orchestration tool.
- Developed a slack bot with Flask for a security engagement initiative encouraging employees to lock their computers.
- O Conducted physical penetration tests and reconnaissance for Oath's red team.

Yahoo Inc. Sunnyvale, US

Technical Intern May 2017 – Aug 2017

- Added a new authentication mechanism for the Screwdriver CD tool with Ember.js and Hapi.js.
- O Developed a plugin to queue Screwdriver jobs with Redis, enabling more complex pipeline structure.

OpenText Corporation

Waterloo, CA

High School Intern Feb 2015 – Jun 2015

Created integration allowing OpenText Core files to be opened in Google Docs for online editing.

PROJECTS

Vault JWT Backend Oct 2019

 JWT-signing plugin for Hashicorp's Vault tool, allowing JWTs to be signed without the private key ever leaving Vault.

yFuzz Mar 2018

- O Tool to allow orchestration of parallel of fuzzing jobs with Docker and Kubernetes.
- O Server and CLI written in Go, offering authentication through mutual TLS and RBAC through Yahoo's Athenz.

ADDITIONAL

O Interests: Linux, ICS, Reverse Engineering, Supply Chain, Sandboxing