Ian Fox

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EDUCATION

University of Waterloo   **Waterloo, ON**
Bachelor of Honours Computer Science   *June 2020*

SKILLS

- Programming Languages: Golang, Python, Java
- Technologies: Docker, Kubernetes

EXPERIENCE

Cognite AS.   **Oslo, NO**
Software Development Co-op   *Sep 2019 - Dec 2019*
- Implemented new authentication mechanism using Hashicorp's Vault.
- Fixed security vulnerabilities related to authorization.

Splunk Inc.   **San Jose, CA**
Software Engineering Co-op   *Jan 2019 - Apr 2019*
- Designed and developed integrations between GitLab CI and static code analysis tools, streamlining developer workflow.
- Built systems to automate tool deployments for the Product Security team.
- Created and delivered training on CI best practices.

Oath Inc.   **Sunnyvale, CA**
Technical Intern   *Jan 2018 - Aug 2018*
- 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.
- Conducted physical penetration tests and reconnaissance for Oath's red team.

Yahoo Inc.   **Sunnyvale, CA**
Technical Intern   *May 2017 – Aug 2017*
- Added a new authentication mechanism for the Screwdriver CD tool with Ember.js and Hapi.js.
- Developed a plugin to queue Screwdriver jobs with Redis, enabling more complex pipeline structure.

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

ADDITIONAL

- Interests: Automation, Security, Reverse Engineering, Distributed Systems