Matthew Frost

Cambridge, Massachusetts

matthewfrost.com

github.com/exupery

VMware, Boston, Massachusetts (2014 - Present) Senior Member of Technical Staff (2019 - Present) Member of Technical Staff (2014 - 2019)

- Software engineer working on VCD, VMware's multi-tenant cloud management solution.
- Expanded functionality and increased safety of zero downtime upgrades. [Java, Hibernate]
- Made changes that allowed VCD nodes to run in a container. [Java, Docker]
- Changed upgrade so upgrading one node would upgrade all other nodes. [Java, Bash]
- Refactored heartbeat code to improve configurability and added multisite heartbeats. [Java]
- Extended the existing VCD query service to support multisite querying. [Java]
- Improved the domain specific language for VCD's upgrade framework to support additional data types and additional SQL operations. [Java, Groovy, SQL Server, Oracle, PostgreSQL]
- Implemented trusting of SSL certificates across VCD in a tenant-aware manner. [Java]
- Added support for automated/unattended install and configuration of VCD. [Java]
- Refactored implementation of VCD cell applications to increase extensibility. [Java]
- Served as co-op mentor during three six-month co-op cycles.

StopBadware, Cambridge, Massachusetts (2012 - 2014)

Software Engineer

- Designed, built, and maintained the applications used by StopBadware.
- Created StopBadware's Data Sharing Program to facilitate sharing of malware-related data among information-security researchers, companies, and organizations. [Java, MongoDB]
- Created an internal application for use in StopBadware's independent review process to provide higher quality data related to each site under review. [Scala, PostgreSQL]
- Rewrote Google's blacklist importer, significantly reducing import time, allowing Google to send their blacklist more frequently, increasing the clearinghouse's timeliness. [Java, MySQL]
- Built an IP/AS resolver allowing StopBadware to publicly report the IPs and Autonomous Systems hosting the most sites blacklisted by StopBadware's data providers. [Java, MySQL]

Education

Master of Science, Software Development **Boston University** *Graduated May 2019*Bachelor of Science, Information Technology **Western Governors University** *Graduated May 2012* **Selected non-work development projects**

- <u>shouldifollow.com</u> Displays metrics such as frequency/timing of tweets and average tweets per day for Twitter users. [*Ruby*]
- DontCast World of Warcraft add-on with over 100,000 downloads. [Lua]
- <u>PvPLeaderboard.com</u> Allows viewing and filtering of PvP leaderboards and the talent, gear, and stat choices of top World of Warcraft players. [Ruby, Go, PostgreSQL]

Volunteer Experience

Operation Code (2017 - Present)

Mentor helping military veterans learn to code and transition into software development careers.

Technical Proficiencies

Java, Scala, Ruby, C++, JavaScript, Lua, Go, Python, Clojure, TypeScript, Groovy, PHP, HTML, CSS, MySQL, PostgreSQL, MongoDB, Redis, Spring, Hibernate, Rails, Play, React, Angular, Docker, Git