

**Objectives:** I'm always curious and driven by a desire to improve myself through productive collaboration in software development. I am customer driven and thrive on a deep understanding of the relationships between products, architecture, and their usage.

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### Skills and Expertise

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Familiar with microservices, distributed/scalable systems, service security, cloud vulnerability detection and analysis

**Programming:** Java, Python, C++, C, C# w/ ASP.NET, PHP, Spanner + Queues, MySQL, Postgres  
Microservices/RPCs, NodeJS, Python & Django, ASP.NET MVC w/ Entity Framework, API integration

**Linux system administration:** scripting, service management, debugging

**Networking:** Cisco, UniFi, QoS, VLANs, Audio-over-IP (Livewire/AES67) management and debug, making WiFi work *well*

**A/V:** Streaming config/setup, audio mixing, photography/film & studio lighting, videography and video editing

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### Employment and Entrepreneurship

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**10x Genomics, Information Security Engineer, Pleasanton, CA (remote)** Feb 2021 - Present

**Google, Software Engineer, Seattle, WA** Jan 2018 - Jan 2021

- ◆ Design and implement scalable queue-based scheduling and task management for vulnerability detection scans
- ◆ Debug and triage oncall issues, including service/dependency debugging and customer support
- ◆ Implement gcloud command utilities to configure custom vulnerability detection service
- ◆ Refactor vulnerability detection service to support leveraging scanners for batch and push mode
- ◆ Implement vulnerability scanners to fulfill CIS benchmark requirements for Google Cloud Platform

**Microsoft, Software Development Engineer, Redmond, WA** Summer 2015, Full Time Aug 2016 - December 2017

- ◆ Design and implement componentized authentication framework for OneNote to manage accounts
- ◆ Define, implement, and analyze authentication telemetry to track user experience and performance of auth system
- ◆ Design feedback analysis procedure to leverage pre-production deployments of OneNote for quality improvements
- ◆ Liaison with EDU customer support team to facilitate expedient collaboration and troubleshooting
- ◆ Implement collaboration telemetry for collaboration within new OneNote sync system

**GE Energy Management Intelligent Platforms, EID Intern, Foxboro, MA** Summer 2014

- ◆ Developed AngularJS, Java, and SQL stack as part of Agile/Scrum team (mostly middle to back end)
- ◆ Implemented Proxy for routing to multiple web services providing websocket support with SSL termination

**Editshare, LLC, Software Engineering Intern, Cambridge, MA** Summer 2013

- ◆ Architected and implemented a cgroup-based QoS system for disk resource management
- ◆ Implemented a DYLD-based system call shim to “enhance the compatibility of” Apple’s Final Cut Pro software
- ◆ Implemented demo on multiple tape-spanning LTFs backup implementation

**Cartera Commerce, Inc, Operations Intern, Waltham, MA** Summer 2012

- ◆ Provisioned and managed Linux systems for the company’s online web services through puppet

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### Education

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**Tufts University, MS in Electrical Engineering & BS in Computer Engineering, Medford MA** September 2011 – May 2016

GPA: BS 3.49, MS 3.80

Courses: High Performance Computer Architecture, Computer Networks, Computer Security, Databases, Computer Engineering, CMOS VLSI, Operating Systems, Biomedical Devices, Power Electronics & Systems, TA Microprocessor arch.

**Assistant General Manager & Director of Operations at WMFO, Tufts Freeform Radio** January 2012-July 2016

- ◆ Maintained & troubleshot Audio-over-IP network, installed 31TB RAIDZ file hosting for music services
- ◆ Implemented archive and streaming services to support on-demand transcoding (see github), implement RDS system
- ◆ Mixed local bands for live on-air and recorded performances

**Boston AV Productions, LLC, Founder and President, Cambridge, MA** April 2013-May 2016

- ◆ Organized and set up an LLC, insurance, and payroll with two other partners and several employees
- ◆ Fulfilled A/V needs for the Tufts campus and Boston area

**Personal:** VoIP, FreePBX, photography (Speed Graphic & Nikon), amateur electrician, piano, IEEE Member