08.12-07.15 Graduate Research and Teaching Assistant, Tufts University, Medford, MA.

- o Assisted students, graded papers, and helped teach 5 courses: Databases (Graduate level), Electronic Musical Instrument Design, Computational Models in Cognitive Science (Graduate level), Unix Systems Administration (Graduate level), and Introduction to Computer Science
- Created back-end infrastructure, custom scripts, and interfaces for automated grading
- o Aided students in creating electronic musical instruments, including circuit design, signal processing, and use of MIDI.
- Lead developer of BlockyTalky, a tangible tool for learning Computer Science (more at http://lpc.cs.tufts.edu/blockytalky/)
- Led teams composed of undergraduate and graduate students to further develop BlockyTalky, including usability studies

06.09-present Webmaster/Developer, Society of the First Infantry Division, Ambler, PA.

- Created a new web site for the Society (https://1stid.org), originally migrating to PHP from ColdFusion, now in WordPress to allow other members of the Society to edit copy and content, with SalesForce integration for membership and event management.
- o Redesigned member management area to be more user friendly and easier to use, as well as more accessible to those unfamiliar with computers or with poor vision
- Managed a database of over 11000 active members with regularly occurring events

09.10-06.12 Research Assistant, Applied Cognitive Sciences Lab, University Park, PA.

- Led a study examining the acquisition of cognitive motor skills with respect to varying training regimens
- Aided in the development of an intelligent tutoring system, including contributing to the development of tutor methodology capable of transitioning learners from declarative to procedural knowledge
- Assisted graduate students with their research, including developing and maintaining Java and C applications
- Lead the design of an environent, forked from a custom MUD project, to allow for cognitive modeling agents to travel in and interact with one another. This work was the foundation of a lab-wide publication
- Edited and revised academic publications, tutorials, and FAQs

04.07-12.09 Intern \rightarrow Application Developer, PJM Interconnection, Norristown, PA.

- Handled daily customer issues in the Database and System Administrator on Duty role for Oracle and Microsoft SQL Server Databases. This included responding to account creations and deletions, access issues, backup management, and security issues and patches
- Fully automated monthly data restores and validations using SSIS and SSRS, as well as primary database backup validations
- Acted as Production Release Coordinator, managing software development, integration, team coordination and release processes for multiple development initiatives
- Acted as system administrator, including writing bash scripts, automating jobs, managing storage, access, and patching of systems

Computer Skills

Languages Python, JavaScript/Node, SQL, Bash, Java, C++, C, PHP, Objective-C, Max/MSP, PureData

Technologies Linux, macOS, and Windows systems, JetBrains IDEs, Git, Jira, New Relic, ThreatStack, Celery, RabbitMQ, Jenkins, Ansible, Vagrant, Docker, Dokku, Front End Frameworks (React/Redux, Angular), AWS ElasticBeanstalk, RDS, EC2, ECS, Lambda, DBMS (Postgres, MySQL, MongoDB, MS SQL Server, Oracle, SQLite) Web Frameworks and Servers (Django, Flask, Express, Restify; Apache, nginx, lighttpd), Redis, Memcache

Interests Contributing to open source projects and communities (Celery, Fish Shell, Python Developers Community), writing Alexa skills, developed a home automation system using Raspberry Pis and Android for electronics, lights, door, camera, and HVAC controls. Playing guitar, bass, and banjo. Building/designing effects pedals.

Publications

References & Available upon request