

Allison King

Arlington, Massachusetts • (609) 206-6679
allisonjuliaking@gmail.com • allisonking.github.io

Professional Experience

- **Cortico** Cambridge, MA
Software Engineer June 2018 - Present
 - Stood up a **Kubernetes** cluster on **Amazon Web Services** with **Prometheus** for monitoring metrics and alerting
 - Developed **Python** processes to ingest news articles shared on Twitter as well as links shared by local news outlets. Deployed applications with **Docker** to a Kubernetes cluster.
 - **MIT Lincoln Laboratory** Lexington, MA
Associate Technical Staff July 2015 - May 2018
 - Served as chief software architect for a suite of applications for open architecture systems to be utilized by the United States Air Force. Applications included a web application built on **AngularJS**, **Express**, **Node.js** and **PostgreSQL** with a REST API, and multiple **Java** programs to verify and validate distributed systems.
 - Served as a software lead for a new program to achieve communication across multiple domains (air, space, ground, sea). Researched deployment technologies such as **Ansible** to achieve cyber secure distributed software.
 - Tested and evaluated contractor software (**Java**) for the Defense Advanced Research Projects Agency (DARPA).
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Projects

- **Our Taiwanese American Story** January 2017 - Present
 - Designed and implemented a **Ruby on Rails** website intended to collect and archive stories of Taiwanese Americans to preserve a collective history and to foster intergenerational and intercultural communication
 - Volunteered as the primary software developer and maintainer. Site also utilizes **HTML**, **CSS**, **JavaScript** for front end, **PostgreSQL** for a database, **Amazon S3** for file uploads and storage, and **Heroku** for deployment.
 - Worked with team to secure funding from [Taiwanese American Archives](#) to maintain site for at least two years
 - **Visualizing Harry Potter Fan Fiction: 1999-2017** Summer 2017
 - Scraped the metadata of 560,000 Harry Potter fan fictions with **Python** from [FanFiction.net](#)
 - Used **D3.js** to create seven interactive visualizations— examples include comparing gender representation in canon vs. fan fiction and comparing titles of stories written about straight vs. gay relationships
 - **Low Cost E-Reader** Spring 2015
 - Built a low cost e-reader from scratch using a microcontroller, an LCD screen, an SD card, and batteries
 - Prototyped on a breadboard, programmed the microcontroller in **C**, and soldered final prototype. Total cost summed to under \$50
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Education

- **Swarthmore College** Swarthmore, PA
Bachelor of Science in Engineering. GPA: 3.70 2011-2015
 - McCabe Engineering Award for Outstanding Engineering Student of the Graduating Class
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Skills

Computer Languages: Python, JavaScript, Java, HTML, CSS, SQL, Ansible, \LaTeX

Technologies: AWS, Kubernetes, D3.js, Flask, AngularJS, Maven, Git