Sean Gatewood

>> Education

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University of Virginia (May 2020) Rodman Scholar, Raven Society

• B.S. Computer Science. GPA 3.95

Notable Courses: Computer Graphics, Algorithms, Introduction to Cybersecurity, Software Testing

>> Experience

DevOps Engineer, Digital Asset (New York, New York / remote)

April 2023 - present

- Develop and maintain infrastructure around critical k8s services.
- Automated the entire (from-scratch) deployment of a critical service its own cluster with all the cloud infrastructure it needed. Utilized GCP, terraform, jsonnet, bash, and helm. Instrumented monitoring/alerts with DataDog as well, and regularly use it to tune our configuration.
- · Regularly engineered automation to seamlessly navigate complex migrations in production with minimal downtime.
- Authored a custom k8s operator in Go to satisfy a particular business need.
- Developed CI/CD pipelines using Google Cloud Build and CircleCI.

Software Engineer II, Appian Corporation (McLean, VA / remote)

August 2020 - April 2023

- Member of a scrum team that created and maintained a variety of developer tooling and infrastructure.
- Contributed to a remote development solution, including a custom Kubernetes service to lease EC2s and a python tool to build/develop/test the product remotely (rather than on your own machine).
- Architected and developed a pipeline to create warm builds that developers can take and use instantly rather than waiting to build from source.
- Initiated & developed numerous prototypes, many of which shipped (or became real quarter-long features for my team).
- Regularly initiated & led architectural design discussions.
- Regularly assisted developers in troubleshooting technical issues, both to help unblock them and to find ways to improve our local build stability.
- Treasured high code quality standards and contributed to our data-driven goal to lead the department in code quality and component health.
- Mentored two interns as a Summer Intern Manager, meeting with them weekly to optimize their internship experience.

Software Engineering Intern, Uber Advanced Technologies Group (Pittsburgh, PA)

May 2019 - August 2019

- · Developed and benchmarked alternate implementations for a key-value store using various database technologies (e.g. LevelDB, Sqlite3).
- Presented results to Uber ATG software engineers.

Teaching Assistant - Introduction to Programming, University of Virginia (Charlottesville, VA)

Fall 2017 - May 2020

- Assisted hundreds of students with introductory programming concepts in Python.
- Created <u>review videos</u> that have received over 13,000 views.
- Helped manage the course as one of four "Head TAs."
- Saved TA time / effort by automating the grading of a remote google docs exam question using Python.
- Worked with many students directly in office hours, encouraging many that they can learn to code.

Software Engineering Intern, NASA Langley Research Center (Hampton, VA)

May 2018 - May 2019

Spring 2019

- Data Management for Airborne Atmospheric Composition Data.
- Added HDF file compatibility to NASA's TOLNet File Format Scanner and Curtain/Profiles Plotter.
- Engineered a full-stack web application (JQuery, AJAX, cgi, C++) for atmospheric researchers to create customized data
- Presented a working prototype to atmospheric researchers and received design feedback.
- Continued part-time development during the fall and spring semesters to harden the merge tool.

>> **Skills** (non-comprehensive, in order of proficiency)

- Languages: Python, Bash, Go, Java, JavaScript, C++, Groovy / Kotlin
- Other technologies: Kubernetes, Terraform, Helm, GitLab pipelines, Feature Toggles / LaunchDarkly, Unit testing / mocking, Vim, Git, SQL, Docker, Terraform / AWS, Functional programming

>> Projects

February 2022

• I didn't have Microsoft Word anymore, so I wrote this in YAML and rendered it into the document you are reading. :-)

· This was just more fun than LaTeX

Fall 2019 - Spring 2020 Capstone Research

• Developed an "automated advising assistant" (Django/React app) to help UVA students create a long-term course plan based on a weighted scheduling algorithm. Worked on the Full-Stack/Application Team, and personally played a key role in integrating the code between teams.

Spring 2019

Created a quick program to help us sort out TA office hours and lab preferences using Max Flow.

Yelp for Off-Grounds Housing

Worked on a SCRUM team to create a Django app to help students browse housing in Charlottesville.

Fall 2018 **Office Hours Chrome Extension**

Created a Chrome extension to notify TAs when a student needs help in Office Hours.