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)

• Develop and maintain infrastructure around critical k8s services.

- Automated the entire (from-scratch) deployment of a critical service into 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)

• 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)

 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)

• Assisted hundreds of students with introductory programming concepts in Python.

- Created review videos 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)

• 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 merges.
- 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 / Launch-Darkly, Unit testing / mocking, Vim, Git, SQL, Docker, Terraform / AWS, Functional programming

>> Projects

This Resume

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

Capstone Research

• Developed an "automated advising assistant" (Django/React app) to help UVA students create a longterm 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.

TA sorter 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.

Office Hours Chrome Extension

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

April 2023 – Present

August 2020 - April 2023

May 2019 – August 2019

Fall 2017 - May 2020

May 2018 - May 2019

February 2022 - Present

Fall 2019 – Spring 2020

Spring 2019

Spring 2019

Fall 2018