Sean Gatewood

stg2bd@virginia.edu | sean-t-gatewood | sgatewood

>> Education

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

Software Engineer II, Appian Corporation (McLean, VA) — August 2020 - present
- Member of a SCRUM team that creates and maintains 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.
- Regularly developed GitLab pipelines, running Bash and Python within custom docker containers.
- Helped design and implement a modern feature toggles framework for a legacy codebase. Designed and implemented an internal dashboard allowing developers to easily change toggle values on internal sites. Developed and tested mission-critical Bash to set up feature toggle infrastructure.
- 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.
- Developed in a unix environment (macOs).

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 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) — May 2018 - May 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 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, Java, Bash, JavaScript, C++, Groovy / Kotlin
- **Other technologies:** Linux, HTML, CSS, GitLab pipelines, Feature Toggles / LaunchDarkly, Unit testing / mocking, Vim, Git, Kubernetes / Helm, SQL, Docker, Terraform / AWS, Functional programming, React

>> Projects

This Resume — February 2022
- I didn't have Microsoft Word anymore, so I wrote this in YAML and rendered it into the document you are reading. :-)

Capstone Research — Fall 2019 - Spring 2020
- 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.

TA sorter — 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 — Spring 2019
- Worked on a SCRUM team to create a Django app to help students browse housing in Charlottesville.

Office Hours Chrome Extension — Fall 2018
- Created a Chrome extension to notify TAs when a student needs help in Office Hours.