Sam Flattery

Software Engineer

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Work Experience

Google
Sunnyvale, CA

Software Engineer III
Oct. 2023 - Present

- CAALM

Google
Sunnyvale, CA

Software Engineer II
Sep. 2022 - Oct. 2023

- Rejection Pages

Google
Ireland (Remote)

Software Engineering Intern
May. 2021 - Aug. 2021

- Worked on the SafetyNet Attestation API, an anti-abuse platform written in C++ which assesses device side integrity on Android devices
- Designed and implemented a principled way to process device information and produce a new integrity verdict for a new class of device
- Extended the system that calculates preexisting integrity verdicts to make it more configurable, scalable and easier to debug
- This new system is on the critical path to assessing over 1 billion devices daily

Google
Ireland (Remote)

Software Engineering Intern
May. 2020 - Aug. 2020

- Created a randomized testing system for Envoy, an open source L7 proxy
- Implemented an abstract state tracker that maintained the correct state of the system to ensure updates were properly processed after executing the randomized input
- Fixed two logical bugs in Envoy's implementation found through this testing method
- Increased coverage over key files by more than 40%

Education

Carnegie Mellon University
Pittsburgh, PA

B.S. in Computer Science, Concentration in Computer Systems
Aug 2018 - May 2022

- Cum. GPA: **3.91 / 4.00**
- School of Computer Science Dean's List, High Honors F18, S19, F20, S21, S22
- Selected courses:

15-410 Operating Systems	**15-440** Distributed Systems	**15-418** Parallel Computer Architecture
15-451 Algorithm Design & Analysis	**15-281** Artificial Intelligence	**15-445** Database Systems

Projects

The Atlas Project
Pittsburgh, PA

Software Lead
Aug. 2019 - May 2021

- Managed the software team developing a fully autonomous gravity-powered vehicle
- Presented weekly briefings on software progress to the organization and assigned tasks to team members
- Integrated deep learning semantic segmentation into the vehicle's control mechanism

iOS App - FCE++
May. 2019 - Aug. 2019

- Created an iOS app on which students can view CMU's course information and ask questions about courses
- Utilized the Parse Platform API and HTTP requests to manage a server-side database
- Compiled data from CMU's CSV of course data to JSON format using Python's Pandas, CSV and JSON modules

Skills

- **Programming Languages:** Java, C++17, C, Python, Swift