

Jonan Seeley

jonan.seeley@gmail.com | 1-412-951-3301 | [github/jonanseeley](https://github.com/jonanseeley) | jseeley.xyz

EDUCATION

BSc. Computer Science With Concentration in Security and Privacy

Pittsburgh, PA | May 2021

CARNEGIE MELLON UNIVERSITY

Coursework: Distributed Systems; Operating Systems; Natural Language Processing; Usable Security and Privacy; Cryptocurrencies, Blockchains, and Applications

WORK EXPERIENCE

TIKTOK | CYBER SECURITY SOFTWARE ENGINEER

Mountain View, CA | Jul 2021 – Present

- Developed and maintained independent microservice with upstream and downstream dependencies, online since January
- Developed prototype userspace sandbox system using KubeArmor
- Assisted with service update and migration for cross functional team

AMAZON | SOFTWARE DEVELOPMENT INTERN

Seattle, WA | Jun 2020 - Aug 2020

- Integrated team's service with two sister team services to build foundation for further integration
- Updated front-end, back-end, and remote procedure interface to facilitate service integration

CARNEGIE MELLON UNIVERSITY | TEACHING ASSISTANT

Pittsburgh, PA | Jun 2018 – Dec 2020

- Led recitations and held office hours multiple times per week
- Managed autograding platform for 11 programming assignments and 2 lab exams

PITTSBURGH SUPERCOMPUTING CENTER | DEVOPS ASSISTANT

Pittsburgh, PA | Jun 2016 – May 2018

- Collaborated with the Systems team to maintain supercomputers
- Ensured that supercomputers utilization was monitored and above 75%

PROJECTS

OPERATING SYSTEM KERNEL

C

- Developed preemptive multithreading operating system kernel
- Implemented over 20 unique POSIX-like system calls
- Integrated user-level threading library to enable multithreaded userland programs

FILE CACHING PROXY

JAVA

- Developed concurrent file caching code to locally cache files from a remote server
- Designed and implemented check-on-use caching protocol
- Supported multiple concurrent client connections

BOGGLE

DJANGO

- Wrote multiplayer web-based implementation of classic board game
- Used websockets to allow for asynchronous communication

SKILLS

Languages: Python, Go, C, Java, HTML/CSS

Technology: Unix, Git, Docker, Kubernetes, L^AT_EX