brian.tracy33@gmail.com (650)-799-4251

Education

B.S. Computer Science: Brown University September 2017 - December 2021 Key Courses: Operating Systems, Systems Programming, Databases, Software Exploitation, Programming Languages

**Technical Skills** 

Programming Languages: C++, C, x86 assembly, Python, Java, TypeScript, OCaml Technologies: Linux, Git, CMake, gdb, LATEX

Work Experience Software Engineer

June 2021 - Present

Onshape/PTC, Boston MA

- Designed and implemented a backwards compatible serialization framework for our C++ application's 3D model data.
- Assumed ownership of and improved source code generation system.
- Championed the modernization of our C++ code and toolchains.
- Zealous code reviewer, built team awareness of modern C++ best practices.

System Administrator / Head Teaching Assistant September 2019 - December 2021 Brown Computer Science Department, Providence RI

- Head SunLab Consultant, responsible for leading a team of 15 student sysadmins.
- Head TA for "Software Exploitation" (ELF, x86, linkers, binary hardening).

Software Engineer Intern Verizon, San Jose CA

Summer 2020

- Used TypeScript, AWS Lambda, and DynamoDB to create an integration between the company's video conferencing product and external medical providers.
- Introduced extensive automated testing to ensure the reliability and scalability of the system.

Software Engineer Intern

Summers 2018 & 2019

Blue Jeans Network, San Jose CA

- Worked in Swift to add features and fix bugs in the company's macOS application. My contributions were broad in scope: UI, business logic, interactions with backend APIs.
- Gained fluency with version control systems, issue trackers, and code review process.

Software Engineer High School Intern

Summers 2015 & 2016

Blue Jeans Network, Mountain View CA

- Designed and implemented a collaborative note taking application using JavaScript and WebSockets.
- Lead an initiative to bring the accessibility of the company's web app into compliance.

Misc

- Top 6% by reputation of users on Stack Overflow.
- Contributed to pip (Python package manager) and a minor contribution to LLVM.
- I write technical blogposts where I re-implement bare-bones versions of classic Linux software (pthreads, tar, gprof) from scratch.