Nate **Browne**

Software Engineer, PL and Computer Security Enthusiast

San Francisco, California

☎ +1 (949) 520-0644 | ✉ npcompletenate@protonmail.com | ⌂ https://nate-browne.github.io | ⎁ nate-browne | ⎙ nate-browne

Education

University of California, San Diego   *La Jolla, CA*

B.S. in Computer Science and Cognitive Science, GPA 3.1   *June 2020*

- Resident Assistant for two years in Warren College
- Founder of Late Night Hacks, a computer security club and CTF team

Skills

PLs   Python, C, C++, Java, Haskell, LATEX, ARM Assembly, x86, OCaml
Languages English, Spanish

Experience

SurveyMonkey   *San Mateo, California*

Software Engineer   *Aug. 2020 - Present*

- Software engineer on the billing and payments development team

UCSD CSE Department   *La Jolla, CA*

Tutor   *Jan. 2018 - Jun. 2020*

- Undergraduate TA for CSE 11 (Intro to Object-Oriented Programming), CSE 12 (Basic Data Structures), CSE 15L (Software Tools and Techniques), and CSE 30 (Computer Organization/Systems Programming) with Gary Gillespie and Rick Ord.
- Created and proctored exams; graded assignments, quizzes, and exams; and held tutoring hours
- Languages used: C, C++, Java, ARM Assembly, BASH scripting

SurveyMonkey, Inc.   *San Mateo, CA*

Software Engineer Intern   *Jun. 2019 - Aug. 2019*

- Worked on the billing and payments development team and used Python and Java to build out a new backend framework for storing credit card data into a different secure database and migrating data from one to the other.

ServiceNow, Inc.   *La Jolla, CA*

Software Engineer Intern   *Jun. 2018 - Aug. 2018*

- Worked on the core platform development team and used Java to write integration tests and a software benchmarking tool.
- Worked with teammembers to triage and fix reported platform bugs.

Projects

RENT   *On Github*

Python, React Native, Flask, mariaDB   *May 2018*

- Worked with a team of 10 on a quarter long software engineering project in which we built a mobile app to hep roommates manage their rental.
- I helped to architect the app, which included choosing the frameworks, setting up the repository, writing and implementing the DB schema, and working on the backend Flask app that the React Native app used as an API.

Autograder Web Developer   *La Jolla, CA*

Flask, Python, PostgreSQL, Docker   *Apr. 2018 - Jun. 2020*

- I'm a lead developer on the Autograder team (autograder.ucsd.edu), a service used by 2,000+ UCSD CS students and professors to facilitate student-tutor queues and automated homework grading.
- I helped lead a redesign and rewrite of the codebase to migrate it to more modern technologies and make it easier to maintain.

CSE 12 Redesign   *On GitHub*

C++   *Jul. 2019*

- I wanted to try out the life of a professor, so I made a website, wrote assignments, and wrote lecture notes for a revised version of the "Basic Data Structures" class at UCSD