Nate **Browne**

SOFTWARE ENGINEER, COMPUTER SECURITY ENTHUSIAST

San Francisco, California

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Education

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

B.S. IN COMPUTER SCIENCE   *June 2020*

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

Skills

Programming Languages	Python, C, C++, Java, Haskell, LaTeX, ARM Assembly, x86, OCaml
Spoken Languages	English, Spanish

Experience

Momentive, Inc.   *San Mateo, California*

SOFTWARE ENGINEER   *Aug. 2020 - Present*

- Software engineer on the billing and payments development team
- Helped maintain and modernize the automatic billing system as the service owner for the system
- Led a project to migrate vendors for billing emails, saving operating costs for the company
- Built out a billing invoice authorization page to prevent users from seeing invoices that don't belong to them, preventing over 50,000 unauthorized billing invoice views.

UCSD CSE Department   *La Jolla, CA*

LEAD UNDERGRADUATE TA   *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

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.

Projects

RENT   *On Github @nate-browne*

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 help roommates manage their rental.
- Acted as the main architect and backend tech lead by designing APIs, writing the DB schema, and building the infrastructure to deploy to AWS

NotARook-ie   *On Github @nate-browne*

C

- Wrote a fully functional chess engine in C that is rated about 2500 ELO
- Engine uses alpha-beta pruning and negamax, with other optimizations, to find and play the best moves.

CSE 12 Redesign   *On GitHub @nate-browne*

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
- Course progresses through basic to intermediate data structures while having students implement the C++ STL versions by hand