

# MICHAEL CHEN

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## EDUCATION

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University of California, Berkeley

GPA 3.9/4.0

### *Bachelor of Science in Electrical Engineering and Computer Science*

Relevant Coursework: Data Structures, Discrete Mathematics and Probability Theory, Designing Information Devices and System I & II, Machine Structures, Efficient Algorithms and Intractable Problems, Introduction to Machine Learning, Introduction to Quantitative Finance, Computability and Complexity, Computer Security, Probability and Random Processes, Operating Systems and Systems Programming, Computer Vision, Introduction to Database Systems, Introduction to the Internet, Programming Languages and Compilers, Intro to Building Apps

## WORK EXPERIENCE

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Amazon, Seattle, WA     *Software Engineering Intern*

May 2023 - Aug 2023

- Launched experiment on text shown next to Amazon's Choice badge, which allowed us to deprecate a fourth of the package, reducing the complexity of the codebase
- Onboarded configuration store, which allowed for easier management and control of configuration

Paypal, San Jose, CA     *Software Engineering Intern*

May 2022 - Aug 2022

- Optimized testing pipeline by taking advantage of Spring context caching which sped up test build by 300%
- Increased observability in post deployment activities through automated shell scripts and DataDog alerts that pinged team slack which reduced on call workload as deployment no longer needed to be micromanaged
- Fixed and evaluated security risks in the Braintree payments application using BlackDuck

## PROJECTS

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**Gitlet** - created version control system similar to github with Java

- Allowed users to add, commit, and merge files in repository
- Designed system from scratch

**OS** - Built an OS on top of Pintos with C and Assembly

- Implemented process control and file system syscalls
- Designed and implemented deadlock-free priority thread scheduler, synchronization primitives, a file system with support for subdirectories and extensible files demonstrating strong object-oriented design skills

**Wordchase Webapp** - <https://github.com/michaelbbchen/wordchase>

- Created a scrolling typing game using ReactJS, Express Typescript, NodeJS
- Dockerized and deployed stack on AWS EC2

**NFTrends** - <https://github.com/evanhu1/NFTrends.git>

- Collected content, likes, and comments of ~50,000 tweets using Twitter API
- Created a popularity metric using spam filters and sentiment analysis
- Built on ReactJS, Flask, and Google Cloud MySQL

**Robot Car** - created a robot car that could go straight or turn based off voice command

- Trained a regression model to control power input and wheel speed to properly execute each command
- Created a band pass filter to only let in frequencies in average human voice and
- Used clustering and classification methods to differentiate between the three voice commands

## SKILLS, ACTIVITIES, AND AWARDS

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**Language Proficiencies:** C++/C, C#, Java, Go, Kotlin, HTML, Python, Typescript, SQL, Swift, Unix, Javascript

**Awards:** Eta Kappa Nu member, 3 times AIME, USA Computing Olympiad Gold

**Hobbies:** volleyball, table tennis, bouldering, board games, piano