

# ANDREW CHEN

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## EDUCATION

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### University of California - Berkeley

Expected Graduation May 2022

*Bachelor's in Computer Science, GPA: 4.0*

*Berkeley, California*

- **Skills:** Java, Python, Ruby on Rails, JavaScript, HTML/CSS, Git, SQL, C++, and Scheme
- Relevant coursework: Data Structures & Algorithms, Structure and Interpretation of Computer Programs, and Foundations of Data Science
- Upcoming: Database Systems, Discrete Mathematics & Probability Theory, and Linear Algebra & Differential Equations

## PROJECTS

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### Git | *Java*

- Reinforced version-control skills by building a simplified version of Git
- Implemented Git features including conflict resolution, *merge*, *checkout*, and *branch*
- Organized development by writing a detailed technical specification and systematic automatic tests
- Strengthened concepts on serialization, Git internals, file I/O, and hashing on an intimate level

### Social Network | *Ruby on Rails, SQLite, and HTML/CSS*

- Collaborated with partners using Git and GitHub to create a social media website
- Implemented CRUD operations for posts, messages, and comments
- Developed front-end with HTML/CSS and Bootstrap

### Sketch | *JavaScript and HTML/CSS*

- Created a clean and user-friendly website with basic functionality similar to Microsoft Paint
- Users can paint on a resizable canvas in multiple colors and save their drawings

### Cipher Machine | *Java*

- Built a reciprocal cipher with more than  $1.5 \times 10^{20}$  possible configurations that can encode and decode text
- Emphasized test-driven development with JUnit, clean style, documentation, and error handling

### Type Racer | *Python*

- Wrote a program that can autocorrect typos as well as compute both typing speed and accuracy

## EXPERIENCE

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### UC Berkeley EECS Department

Sept. 2019 – Present

*Academic Intern*

*Berkeley, California*

- Part of the teaching staff of Structure and Interpretation of Computer Programs
- Teach Python, SQL, and Scheme in 10 to 20 student sized labs
- Communicate technical topics including programming paradigms, tree recursion, and building interpreters

### Union City Library

Aug. 2018 – Sept. 2018

*Python Teacher*

*Union City, California*

- Developed and conducted a pro-bono Python training course for underrepresented minorities
- Parents gave feedback that students left more confident and more interested in computer science

## AWARDS

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- ECOO Programming Contest: Team placed 2<sup>nd</sup> in the eastern provincial region and qualified for the final provincial round
- Carman E. Pollock Memorial Mathematics Award
- The Berkeley Undergraduate Scholarship