## Steven Lu

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Education University of California, Berkeley (GPA: 3.42)

2015 - 2019

B.A. Computer Science (Major GPA: 3.50)

Coursework CS61A: Structure and Interpretation of Programs

CS70: Discrete Mathematics and Probability CS170: Efficient Algo. and Intractable Programs Math 54: Linear Algebra and Diff. Equations CS97: Field Study

Math 53: Multivariable Calc. CS61B: Data Structures CS61C: Machine Structures

Languages Proficient

Java C Python Knowledgable HTML/CSS

Javascript SQLite

Projects

#### TypeFaster (Java)

November 2016 - Present

- Developed Java application that calculates words per minute and finds major typing speed bottlenecks
- Designed String compression to store text samples in half the memory space

#### Encryption (Java)

December 2016 - Present

- Encrypts and decrypts messages with RSA using 1024 bit randomly generated keys
- Utilizes randomized padding to improve the security of the encryption

#### Bear Maps (Java)

April 2016

- $\bullet$  Developed a zooming, navigatable map of Berkeley using raster graphics
- Calculates the shortest route between any two points using map data

#### Image Compression (Python)

December 2016

- Compresses and decompresses an image using DCT and Quantization
- Utilizes Spark API to execute compression on multiple images on parallel

#### Personal Website(HTML/CSS, JQuery)

December 2016 - present

 Coded and designed my personal website to exhibit my portfolio, which can be accessed at https://steven-lu-522.github.io/steven-lu.github.io/

# Professional Experience

### UC Berkeley Computer Science Department

January 2016 - Present

- CS61B Lab Assistant
  - Attend office hours and labs to guide students through assignments and projects
  - Explain lecture concepts including algorithms, data structures, and efficiency

#### Digital Media Academy

June 2016 - July 2016

Teaching Assistant

- Taught basic coding in Java, Arduino, and Swift
- Helped the students design, code, and debug their applications