

# Jonathan Gong

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## EDUCATION

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**University of California, Berkeley**  
B.S. Electrical Engineering and Computer Sciences

Berkeley, CA  
Grad: May 2019

**Whitney High School**

- **Salutatorian**, National AP Scholar (GPA: 4.29)

Cerritos, CA  
Sept 2010-Jun 2016

## RELEVANT COURSEWORK/SKILLS

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- Data Structures
- Great Ideas in Computer Architecture
- Discrete Mathematics and Probability
- Linear Algebra and Differential Equations
- Multivariable Calculus

**Skills:** Python, Java, C, C++, Swift, LaTeX, Git, OSX, Unity, HTML, CSS, Javascript

## EXPERIENCE

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**Environmental Sustainable Development (ESD) China**

Software Development Intern/Project Manager

Beijing, China  
June 2017-Present

- Led development of an iOS app involving evaluation of a wide array of remediation sites to provide diagnostics for environmental remediation
- Worked on backend treatment algorithms with senior software engineers to develop app functionalities capable of identifying optimal methods for different pollutants and site types

**US-China Clean Tech Center (UCCTC)**

Website Development Intern

Los Angeles, CA  
June 2015-Aug 2015

- Assisted in front-end development for the UCCTC website
- Worked with full-stack developers on a modern theme, effective layout, and fluid user experience for site visitors

## PROJECTS

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**Minecraft Clone**

C++

- Implemented clone of the popular PC game Minecraft, working with OpenGL, memory operations, vectors/matrices, stack operations, data structures

**Chat Server and Client**

Java

- Implemented chat server allowing for multiple client communication, messages sent/received to non-blocking sockets
- Users join and leave channels, uses buffer for retrieval and reconstruction of packets

**BearMaps**

Java

- A\* and other efficient search algorithms implemented for routing and auto-completion of string prefixes
- Web API with QuadTree to support zoom at different levels of Berkeley map

**Web Scraper**

Python

- Implemented scalable script utilizing non-blocking algorithm to scrape food websites for highly-rated recipes

## LEADERSHIP AND ACTIVITIES

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**WHITNEY HIGH SCHOOL FTC ROBOTICS Team**

Programmer

Cerritos, CA  
Sept 2014- May 2015

- Tasks included working with Blocks Programming Tool to design and implement an agile competition robot

**Whitney High School Digital Media Club**

Game Programmer

Cerritos, CA  
June 2015- June 2016

- Worked with student team to program and distribute side-scrolling 2D games
- Implemented VR demos using Unity to showcase for club fairs

## ADDITIONAL

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**Interests:** Mobile development, VR, algorithms, game programming, cybersecurity, artificial intelligence