# John He

# http://johnhe.xyz/

2338 Spectra Southside, Unit 302 Berkeley, California 94704

August 2020 - May 2024

GPA: 4.00/4.00

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#### **EDUCATION**

## University of California, Berkeley - College of Letters and Science

Bachelor of Arts in Computer Science

Generation Change Scholarship recipient

#### Relevant coursework:

- Structure and Interpretation of Computer **Programs**
- Data Structures
- Designing Information Devices and Systems I
- Designing Information Devices and Systems II

#### Current coursework:

- Great Ideas of Computer Architecture (Machine Structures)
- Discrete Mathematics and Probability Theory

## **EXPERIENCE**

#### Software Engineer (Full-Stack), www.doriot.com

July 2020 - Present

- Develop a mobile application focused on educating about startup-investing through a simulation
- Worked on registration and authentication flow on both the front-end and back-end
- Created logic and UI for the presentation of informational lessons and quizzes
- Maintain a .NET API on the back-end for user and investment logic
- Build and style screens within the application using React Native and CSS
- Implement data storage locally within the user's device
- Manage and load data from spreadsheets into a PostgreSQL database using Python
- Practice Agile-like Development, using Jira to organize sprints

#### **PROJECTS**

### Personal Website, <a href="http://johnhe.xyz/">http://johnhe.xyz/</a>

- Created a personal website with Next.js about me and my interests
- Built and styled pages with HTML elements, Next.js components, and CSS
- Designed a phone-like UI to organize and display information
- Recreated styling and behavior of popular applications such as Wikipedia, Spotify, and Netflix

## Dungeon Escape, demonstration: https://youtu.be/z65RVMKh0fl

April 2021

- Worked with a partner to create a two-dimensional world exploration game in Java
- Randomly generated a landscape of rooms and hallways based on a seed entered by the user
- Spawned special objects within the game that the player can interact with
- Designed a menu for users to modify the generation of the world
- Implemented a system for saving and loading the game by writing to text files

### Stock Bot, https://github.com/heisjohn/stockbot

2019 - 2020

- Developed a Discord bot that procedurally generates a mock stock market where users buy and sell stocks with chat commands
- Stored and modified user data using the Python JSON library
- Automatically produced charts for stocks using Matplotlib
- Interacted with the Discord API to detect commands and send out images and messages

# **SKILLS**

### **ACHIEVEMENTS**

- Strong understanding of Python, Javascript, Java
- Basic understanding of C#
- React Native, React, Next.js
- HTML, CSS
- Jira for project management and organization
- Version Control Git, Github, Bitbucket
- National AP Scholar
- National Honor Society
- Perfect score on the ACT
- AAPT Physics Bowl 1st place in Illinois, Iowa, Nebraska, and Wisconsin (2019)
- ICTM Written Competition 4th place in Illinois (2019)

August 2021