

# Simon He

## Experience



CUNY Tech Prep - Bootcamp

*Software Engineer*, Full Stack

Jun 2019 - May 2020 | New York, NY

- Took a B2B project from ground up to production in a matter of 4 months
- Followed OWASP security principles to ensure no vulnerability in application
- Worked with [TruWalks](#) to build an upgraded version of their existing site
- Leveraged extreme programming principles, proactively adapting to client needs
- Designed UML diagrams to depict activity, use-case, sequence, class, and states



*Software Lead Developer*, Android

Feb 2014 - May 2014 | New York, NY

- Led a team of 4 to develop a fashion application in the Android marketplace
- Displayed clothing and accessories to over 11,000 Virtual Enterprise users
- Coordinated with design team, serving over 24 unique products

## Projects

**Amazon Clone**, Full Stack Ecommerce Website

Firebase, React, Express, Stripe

<https://clone-8bfdb.web.app>

Sep 2020 - Present | New York, NY

- Redesigning Amazon's website with features they should consider implementing
- Use firebase for user authentication and persistence in navigating between web pages
- Pulled in Stripe API for payment processing and transaction logging for users
- Followed a serverless architecture for fast deployment and scalability

**Easy Split**, Calculations in seconds

React Native, Redux

<https://github.com/simonhe1/AdvancedTipCalculator>

May 2020 - Present | New York, NY

- Intuitively seamless price splitting mobile app for individual or group events
- Increase render speed by 3% with redux state management, lazy loading, and throttling

**RecognizeMe**, Music generation with Computer Vision

React, Python, Flask

<https://github.com/simonhe1/RecognizeMe>

Mar2020 - Present | New York, NY

- Create innovative algorithms to process images with openCV library and extract music notes as connected components
- Use Tone.js to asynchronously play music notes as piano keys based on duration and frequency

**TruWalks**, Dog Walking Scheduler

PostgreSQL, Express, React, Node, Sequelize, axios

Sep 2019 - Jul 2020 | New York, NY

- Served in an agile development team with 2 other developers making a white label web-based app to schedule dog walkers with dog owners
- Decrease API cost dependencies by 24% by making components from scratch
- Redesign React logic with Hooks to increase readability and maintainability
- Reduced web traffic by 2% by having persistent timeout for idle users

## Contact

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<https://portfolio-e5d5b.web.app/>

## Education



Queens College

May 2020

B.S Computer Science

## Coursework

Object Oriented Programming

Data Structures & Algorithms

SQL Databases

Software Engineering

Computer Vision

Data Analytics

Image Processing

## Languages

Java, JavaScript, C++, HTML,

CSS, Python, PHP, SQL, Swift

## Web Development

Node, Express, React, jQuery,

axios, Bootstrap, Sequelize,

Material-UI, Passport, Redux,

p5, Nodemon, Docker, bcrypt,

Heroku, Git, Jest, JUnit,

Postman, Phaser, Webpack

## Mobile Development

React Native, Android Studio,

Xcode

## Databases & Services

MySQL, MongoDB, AWS,

PostgreSQL, Firebase

## Awards

**startups**.CUNY Startups

1<sup>st</sup> place in health superlative

[github.com/simonhe1/SoM](https://github.com/simonhe1/SoM)

Android application selected

amongst 426 participants to

spread awareness of mental

health and treatments