

# JUSTIN HE

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## EXPERIENCE

### Bloomberg L.P.

Software Engineering Intern *Summer 2018*

- Developed models to price complex financial deals using machine learning algorithms and data processing techniques (feature selection, regression analysis)
- Automated the optimization of pricing models to improve speed and accuracy using machine learning techniques (hyper-parameter tuning)

### Fae Interactive

Software Engineering Intern *Summer 2017*

- Designed, developed, and tested responsive iOS UIs using Swift and Xcode
- Worked and collaborated on the Fae Map's app's location-based services to provide more seamless and easy-to-use user experience

### USC Department of Computer Science

Course Producer *Fall 2017, Spring 2018*

- Teaching assistant for CSCI 103: Introduction to Programming
- Mentored students on fundamental programming concepts (functions, data structures, object oriented programming)

### Memorial Sloan Kettering Cancer Center

Research Intern *Summers 2014, 2015*

- Automated visualization of data sets using R, serving 30+ lab researchers
- Conducted independent research on Acute Myeloid Leukemia, assessed the disease's dependency on specific proteins

## PERSONAL PROJECTS

### Tommy Bot (<https://www.facebook.com/usctommybot/>)

Co-founder and Lead Developer *September 2016 - Present*

- A chatbot on Facebook Messenger that answers hundreds of students questions about USC daily, with 55,000 total queries answered
- Manage, design, and develop all core aspects of the technology: application architecture, information aggregation, natural language processing and more

### Duelr ([duelr.herokuapp.com](http://duelr.herokuapp.com))

Developer *January 2016*

- With a hackathon team at PennApps XIII, created a 3D multiplayer game that transforms players' phones into virtual swords, winning the Plaid Prize award
- Created front-end project components: 3D rendering, interactions, and connections using HTML, CSS, and Javascript

## LEADERSHIP

### Lavalab ([usclavalab.org](http://usclavalab.org))

Director of Development *May 2017 - May 2018*

- Assisted development of a comprehensive product building curriculum, with a focus on the developmental aspects for USC's premier product incubator
- Hosted internal and external workshops on product development skills
- Created, maintained, and updated the website and additional software

## EDUCATION

### University of Southern

**California** Class of 2020

B.S Computer Science,  
Philosophy Minor, 3.57 GPA

## SKILLS

### Languages

Python, Swift, C++, HTML, CSS,  
Javascript, R

### Frameworks & Tools

React, EJS, Node.js, jQuery, SQL,  
MongoDB, Heroku, Digital Ocean,  
AWS, Git

### Software

Photoshop, Illustrator, InDesign,  
Lightroom, Premiere (Adobe)

## AWARDS

### USC Iovine and Young Innovation Prize (2017)

\$10,000 for Tommy Bot

### USC Dean's List Scholar (Spring 2017, Fall 2017, Spring 2018)

### PennApps XIII Plaid Prize Award (2016)

Innovative Design for Duelr

### LocalHackDayNY Best Overall Hack (2015)

### TigerHacks 2nd Place Award (2015)

## INTERESTS

Entrepreneurship  
Computer Security  
Data Analytics  
Hip-Hop Dance (Chaotic 3)  
Photography, Videography  
Swimming, Water Polo