

# Andrew Gu

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## Education

### University of Maryland, College Park

*B.S. Computer Engineering*

- CMSC216 (Introduction to Computer Systems) Teaching Assistant
- CMSC412 Operating Systems, CMSC426 Computer Vision, ENEE439M Machine Learning, ENEE459B Reverse Engineering and Hardware Security, CMSC434 Introduction to Human Computer Interaction, CMSC414 Computer and Network Security

## Industry Experience

### Upside Business Travel

Aug 2019 - Present

*Software Engineer, Apollo*

*Washington DC*

- Building features & fixing bugs covering shopping & booking inventory, security & monitoring across our React/Redux frontend backed by Go & Node.js microservices
- Contracted out as part of small team to Heartbeat Health to rebuild and launch their P2P video chat application during COVID-19 in their Kotlin & React Native powered mobile application.
- Planned, built and launched a brand new product targeted towards the PPP loans as part of small team in React & Node.

### IBM

July 2018 - July 2019

*Software Engineer, Daeja Viewone*

*San Jose, CA*

- Collaborating with two senior engineers, two product managers, and a designer in the UK and US to redesign a thirty year old document viewer by writing features in Java EE and Google Web Toolkit (GWT) and performing infrastructure upgrades to ensure stability and compatibility
- Researched and reverse engineered PDFs and XML files to inject vulnerabilities for testing
- Led team of six to build a SQL Search plugin for an existing product in React and Redux as part of IBM's New Hire Developer program

### IBM

May 2017 - August 2017

*Extreme Blue Technical Intern, IRIS Team*

*Austin, Texas*

- Utilized IBM Watson, Javascript, and Python to build a real-time virtual agent for service desk agents
- Collaborated with an agile development team and product manager to plan and manage development from IBM, ServiceNow, and Intercontinental Hotels Group (IHG)
- Led development of PoC mobile and desktop application that was deployed live to a test location and pitched to IBM, ServiceNow, and IHG executives to determine future expansion of the project's financial budget

### FiscalNote

September 2015 - May 2018

*Software Engineering Intern, Frontend Team*

*Washington D.C.*

- Built features and fixed bugs across a Ember.js frontend backed by Ruby on Rails and Node.js microservices
- Researched user requirements and accessibility techniques, built features in Ember.js, and established guidelines to make app more accessible for visually impaired
- Won hackathon by working with marketing, data science and strategy team members to build a version of FiscalNote for the European Union (EU)

## Volunteer

### Hackbright Academy

September 2018 - Present

*Software Engineer Mentor*

*San Francisco Bay Area*

- Mentoring students one-on-one at an all female engineering bootcamp looking to transition careers
- Clarifying concepts relating to software engineering and computing, performing code reviews for student's projects, giving advice and tips for coding interviews, providing overall moral support for the students
- Utilizing Python, Javascript, PostgreSQL, and Vagrant to teach students problem solving skills, troubleshooting techniques, and latest industry best practices

## Research Experience

### UMD Radiation Facilities

September 2016 - December 2016

*Research Assistant*

- Tested new hardware and wrote code samples for new and old equipment to begin development of a controls system for university's linear accelerator in C++ & CERN's ROOT library.

## Projects

### KSA K-Expo

- Built an app to allow audience members to vote for their favorite performance to determine the winner and a backend for the executive board to manage the performances and scores

### NAICA Website

- Led redevelopment of NAICA's front facing site and custom built content management system

## Technical Skills

**Intermediate:** Java, Javascript, Node.js, React.js, Ember.js, Ruby, Ruby on Rails, Python, SQL, PHP, C

**Basic:** Kotlin, Electron, Google Web Toolkit, Angular, Typescript, Elasticsearch, Redis, Assembly, Security, Machine Learning, Computer Vision