

Andrew Gu

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Education

University of Maryland, College Park

B.S. Computer Engineering

August 2014 - May 2018

- 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

IBM

Software Engineer, Daeja Viewone

July 2018 - Present

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

Hackbright Academy

Software Engineer Mentor

September 2018 - Present

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

IBM

Extreme Blue Technical Intern, IRIS Team

May 2017 - August 2017

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

Software Engineering Intern, Frontend Team

September 2015 - May 2018

Washington D.C.

- Built two features and solved issues 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)

UpChannel

Software Engineering Intern

June 2015 - August 2015

New York

- Developed a recommendation engine using PHP and the 42Matters API to deliver a personalized list of apps for each mobile device
- Led team of three in revamp of backend API in Node.js and MongoDB

Research Experience

UMD Radiation Facilities

Research Assistant

September 2016 - December 2016

- Tested new hardware and wrote code samples for new and old equipment to begin development of a controls system for university's linear accelerator
- Worked in C++ and 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: Electron, Google Web Toolkit, Angular, Typescript, Elasticsearch, Redis, Assembly, Security, Machine Learning, Computer Vision