# **Edwin Yu**

### Education

#### University of Maryland, College Park - B.S. Computer Science

Expected May 2021 • GPA: 3.81/4.0

- Honors College, President's Scholarship, CS Departmental Honors
- Relevant Coursework: Advanced Data Structures, Human-Computer Interaction, Bioinformatics, Data Science, Advanced Algorithms, Concurrency & Distributed Systems, Computer & Network Security, Programming Languages, Computer Systems

### **Technical Skills**

Languages Java • Python • JavaScript • OCaml • Ruby • HTML/CSS • C

Technologies Git · Linux · React · Redux · Node · Express · Flask · Spring · Lambda · DynamoDB · MongoDB · MySQL · Docker

# **Work Experience**

#### Amazon Web Services – Systems Development Engineering Intern

Herndon, VA · Sept - Nov 2020

- Designed and developed a full-stack application to streamline the process of manually tracking and scheduling updates to 50+ services and tools within the Serverless organization per week to GovCloud regions
- Saved 40+ engineering hours weekly by automating key steps in the deployment process
- Orchestrated beta test and conducted user interviews to collect feedback for improving UI/UX

#### Okta - Software Engineering Intern

Bellevue, WA • May - Aug 2020

- Built an internal full-stack tool to allow Okta's security team to mass deactivate organizations engaged in malicious activity
- Reduced time needed to respond to mass abuse incidents from days to minutes
- Wrote extensive unit, functional, API, UI, and Selenium tests to achieve full code coverage and ensure high code quality

#### Tesla - Software Engineering Intern

Palo Alto, CA · Jan - May 2020

- Worked on a web application to accelerate the diagnosis of vehicles using alerts, signals, and configuration values
- Decreased application load time by ~30% by optimizing database queries and condensing backend API requests
- Built pipeline to retrain and redeploy machine learning models that identify solutions to diagnostic issues on a weekly basis
- Developed backend system to automatically extract and parse new alert/signal data from monthly firmware releases
- Built email notification system to notify technicians in Gigafactory Shanghai when new diagnostic sessions are created

#### Capital One - Software Engineering Intern

Richmond, VA • Jun - Aug 2019

- Built applications to support the re-platforming and modernization of the company's core customer infrastructure
- Developed a resilient and scalable RESTful API for customer D.O.B queries to meet expected traffic of 450+ transactions/sec
- Built full-stack utility to track daily changes within S3 buckets and simplify EC2 instance rehydration through email notifications

## U.S. Army Research Laboratory - Software Engineering Intern

Adelphi, MD • Jun - Aug 2018

- Enhanced an internal file hosting service by developing features to guard against anticipated network interferences
- Built scripts to preemptively move data fragments out of unstable nodes and periodically redistribute data across the network

## National Institute of Standards and Technology – Research Intern

Gaithersburg, MD • Jun - Aug 2016

Developed a suite of software unit tests to verify the effectiveness of an in-house virtual reality environment (CAVE)

## **Projects**

#### iGraduated, https://devpost.com/software/igraduated

May 2020

- Won "Best use of MongoDB" award at TOHacks 2020
- Developed a web application to allow students to graduate from the safety of their own homes

#### M.O.E.G.A., https://moega.herokuapp.com/

April 2020

- Won 1st place at CatHacks VI (https://devpost.com/software/moega)
- Developed a live streaming platform to simulate in-person lectures geared towards elementary & middle school students