Edwin Yu

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Education

University of Maryland, College Park – *B.S. Computer Science* Expected May 2021 • GPA: 3.8/4.0

- Honors College, President's Scholarship
- Relevant Coursework: Data Science, Advanced Algorithms, Computer & Network Security, Multithreading & Distributed Systems, Computer Systems, Applied Probability & Statistics, Applications of Linear Algebra, Algebraic Structures

Technical Skills

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

Technologies Git • Android Studio • Linux • Jupyter • D3.js • React.js • Node.js • pandas • NumPy • Spring • Docker • AWS

Work Experience

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 architecture
- Developed a resilient and scalable RESTful API for customer D.O.B queries to meet expected traffic of 450+ transactions/sec
- Utilized Kafka data streaming platform to publish updates for consumption by downstream services
- Performed extensive unit/integration tests and deployed API on AWS cloud infrastructure using automated DevOps pipeline
- 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 Development Intern* Adelphi, MD • Jun - Aug 2018

- Enhanced an internal file hosting service by building features to guard against anticipated network interferences
- Implemented Python algorithms to preemptively move data fragments out of unstable nodes and periodically redistribute data
- Developed a Python script to visualize the effects of the algorithms on a network of Raspberry Pi 3's

National Institute of Standards and Technology – *Information Technology Intern* Gaithersburg, MD • Jun - Aug 2016

- Developed a suite of software unit tests to verify that the CAVE (Cave Automatic Virtual Environment) ran properly
- Created a variety of shaders (Blinking Sphere, Iridescent Teapot) using OpenGL to develop a virtual reality visualization

Projects

#Meetup, *hashtag-meetup.herokuapp.com* May 2019

- Built a full-stack web app that connects users traveling to the same locations using MongoDB, Node, Express & Socket.io

Split Mar 2019

- Awarded Honorable Mention in HooHack's "Best Use of Google Cloud Platform" category
- Built an Android app to simplify the process of dividing the contents of a bill among groups using OCR and Regex

vBikes, *v-bikes.net* Oct 2018

- Winner of Capital One's Software Engineering Summit Challenge; top 80 out of 600+ applicants
- Built a web app that visualizes various metrics (Station popularity, Monthly trends, etc.) from an LA bike-share dataset

Activities

Undergraduate Research Member Sept 2018 – Aug 2019

- Researching to increase deep/machine learning transparency in drug research on a 12-student team under ML faculty mentor
- Developed models and explanations for drug toxicity prediction using TensorFlow & scikit-learn

Bitcamp & Technica Logistics Organizer Dec 2018 - Present

- Coordinating with vendors to provide reliable and high-speed internet for Bitcamp, UMD's 1,300+ attendee hackathon, and Technica, the world's largest all-women hackathon