Yusuf Ameri

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EDUCATION

Aug 2015 - May 2018 — University of Maryland, College Park
BS in Computer Science with Data Science Concentration, Statistics Minor
Honors College – Entrepreneurship and Innovation Program (EIP)

WORK EXPERIENCE

Summer 2018 — **Incoming Software Engineering Intern, Capital One**
Richmond, VA

Summer 2017 — **Software Engineering Intern, Microstrategy**
Enterprise Assets Division, Tysons Corner, VA

- Automated the ETL process for real-time employee fitness tracking at Microstrategy for our over 2000 employees with Fitbits using Node.js (express.js), MongoDB, and the Fitbit API
- Developed a custom real-time metrics monitoring dashboard for an Apache Spark cluster using Apache Kafka, a scala consumer, a MongoDB datastore, and the Microstrategy frontend

Summer 2015 — **Software Engineering Intern, National Institute of Standards and Technology**
Applied and Computational Mathematics Division, Gaithersburg MD

- Conducted an extensive code review, wrote unit tests, wrote documentation, and debugged an Open Source MediaWiki (DRMF) for a mathematically-oriented audience.

Summer 2014 — **Software Engineering Intern, National Institute of Standards and Technology**
Center for Neutron Research, Gaithersburg MD

- Engineered *scalable* and *parallel* computational models in OpenCL on a GPU to increase neutron modeling speed *50x* fold. Increased processing speed from hours to minutes.
- Redesigned user interface to increase productivity for various physics models used by the lab

TEACHING EXPERIENCE

Spring 2018 & *Spring 2017* — **Teaching Assistant for CMSC131, University of Maryland**
Undergraduate Computer Science Department, College Park MD

- Currently (/previously) leading a discussion session of over 38 students of variety of majors, preparing slides, grading, and holding office hours for Intro to Object Oriented Programming

Fall 2017 — **Teaching Assistant for CMSC424, University of Maryland**
Undergraduate Computer Science Department, College Park MD

- Help students by holding office hours and help grading for Database Design

TECHNICAL PROJECTS

Fall 2017 — **DFS: Distributed File System** – *CMSC818e: Distributed and Cloud Based Storage Systems*

- Created a fully distributed, peer-to-peer FUSE file system with Golang (Google Drive Clone)
- Designing the system with features such as consistency, consensus (RAFT) and versioning
- Built with: *Go (lang), FUSE, ZMQ (networking)*

Fall 2016 — **Presidential Selections Database** – *CMSC424: Database Design*

- Designed ER model and relational schema as well as scraping numerous websites for data on polls, voting, demographics, and presidential candidates (e.g. party, pictures) since 1789
- Documented full design and development process in a comprehensive document
- *Built with: R, PHP, MySQL, HTML, CSS, Bootstrap, (LAMP Stack)*

September 2016 — **Doctor Alexa** – *MedHacks 2016: John Hopkins University Hackathon*

- Smart voice enabled Amazon Echo assistant to help patients in the medical triage
- Converses and connects you to the medical attention you need
- *Built with: AWS Lambda, Amazon Echo, Node.js*

March 2016 — **WhichBus Navigation** – *Bitcamp 2016: University of Maryland Hackathon*

- Revamped the national NextBus navigation app to provide bus transit directions
- Implemented shortest path graphing algorithms (dijkstra's) on UMD transit system
- Built with: *Ruby Gems, NextBus API*

AWARDS AND RECOGNITION

2015 — Graduated in top 5% of class
2015 — AP Scholar with Distinction
2015/16 — Dean's List (Fall 15, Fall 16)

COMPUTER TECHNOLOGY SKILLS

Languages: Java, Golang, Javascript (ES6), C, Ruby, SQL (MySQL), R
Technologies: Node.js, React.js, Apache Kafka, UNIX, AWS, FUSE
MOOCs: Machine Learning by Stanford University on Coursera (with **Certificate**)
Relevant Courses: CMSC818e(Distributed Cloud Storage Systems),CMSC424(Database Design), CMSC417(Networks)