

Yusuf Ameri

14078 Berryville Rd, Darnestown, MD 20874 | yameri@terpmail.umd.edu | 240-330-7070
github.com/yusufameri | http://yusufameri.github.io

EDUCATION

Aug 2015 - May 2019 University of Maryland, College Park
BS in Computer Science, Data Science Specialization (with Statistics and Math elective focus)
Honors College – Entrepreneurship and Innovation Program (EIP)

WORK EXPERIENCE

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

- Developed a real-time metrics monitoring dashboard for an Apache Spark cluster using Apache Kafka, a scala consumer, a MongoDB datastore, and a Microstrategy frontend
- 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

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, and debugged an Open Source MediaWiki (DRMF) for a mathematically-oriented audience
- Analyzed and documented code for future contributors

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
- Redesigned user interface to increase productivity for various physics models used by the lab

TEACHING EXPERIENCE

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

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

- Led a discussion session of over 30 students of variety of majors, prepared slides, graded, and held office hours for Intro to Object Oriented Programming

TECHNICAL PROJECTS

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

- Currently working on creating a fully distributed, peer-to-peer FUSE file system with Golang
- Designing the system with features such as fault tolerance, consistency, and versioning
- Built with: Go (lang), FUSE, AWS S3, ZMQ

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 Certificate of Meritorious Service for 260+ SSL hours

COMPUTER TECHNOLOGY SKILLS

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