Arushee Agrawal

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Education

Washington University in St. Louis - May 2020 | BS, Computer Science & Minor, Design

Antoinette Frances Dames Awardee | **Dean's List (Aug 2016 - Now)** GPA: 4.0

Upcoming Coursework: Computer Vision (Grad), Video Game Prog., Cloud Computing with Big Data Applications
Completed Coursework: Rapid Prototyping & Creative Programming, Object-Oriented Software Dev Lab, Linear Algebra, Probability & Stats, Data Structures & Algorithms, Intro to Parallel Programming, Discrete Math, Interaction Design

Work Experience

Mastercard *Software Engineering Intern* June - Aug '18
Implemented a process that aids in Continuous Integration & Delivery of software. Built an internally-facing application & log-based visualization using D3.js that visualizes the same processes real-time on Mastercard microservice applications deployed on Pivotal Cloud Foundry. Also worked on debugging Jenkins pipelines.

Engineering Test Kitchen – Prattle Analytics *Part-time Intern* Jan - May '18
Worked in a team of 5 students with start-up, Prattle Analytics, that assesses market movements through sentiment analysis. Learned & used computing tools like AWS Lambda to assess whether or not the company's data processing could be made server-less, by building a proof of concept.

CSE247: Data Structures & Algorithms *Undergraduate Teaching Assistant* Jan '18 Onward
Implementing important algorithms including shortest path & encryption, & data structures including min-heaps & graphs. Analyzing runtime complexity to discuss pros & cons of problem solving techniques.

CSE231: Intro to Parallel & Concurrent Programming *Undergraduate Teaching Assistant* Jan - May '18
Discussing parallel & concurrent programming structures, using the Java Concurrent Library, and the benefits of parallel programming. Explaining several sequential algorithms, & devising ways to parallelize them.

Skills

Languages/Frameworks: Java, C++, MySQL, HTML, CSS, Javascript (React, React Native, D3), PHP, Git, Python
Software: AWS Lambda, AWS EC2, MongoDB, Hadoop, Cloud Foundry, Photoshop, Illustrator, Maya, Sketch, Unity

Selected Projects

Rightover *React native mobile application to help restaurants sell leftover food.* Jun '18 Onward

- Worked on connecting to the Firebase database to load restaurant details, locations for maps, & catalogs.
- Building an interactive React Native template for restaurant catalogs.

Digital Dashboard *A digital desktop Node application with to-do lists, notes and doodle spaces* May '18

- Express App built with ReactJS on Node, with storage on MongoDB (MERN stack).
- To-do list, digital post-its, & a doodle pad, and Unsplash API integration for background images.

Digital Calendar *Digital Calendar Web App where users can add, edit and delete events* March '18

- Built with pure Javascript, JQuery, PHP and a MySQL database.
- Allows creation, editing and deletion of events on a users calendar.

Map-Reduce Framework *Developed a Map-Reduce Framework using existing concurrent structures in Java.* Sept - Oct '17

- Can be used for word counting and finding mutuals in several large text data sets
- Generic Mapper and Reducer classes to allow processing of any kind of data

MuSyC.Mi *Music-to-Color Synesthesia Simulator to make music accessible to the hearing-impaired.* Nov '16

- **Top 10** at **Hacking Arts 2016 at MIT**
- Contribution: Worked on the implementation of the sound filter that helped reduce perception of noise, as well as the algorithm that assigns colors to different kinds of sounds.

Other Achievements & Activities

Anita Borg Scholar, Grace Hopper Conference '18 2018

Mastercard Intern Innovation Challenge Winner, *Awarded to best technically feasible & commercially viable solution proposed by a team of interns to solve a target personality's problems with digital payments, that can be implemented by Mastercard in the future* July '18

Antoinette Frances Dames Award Recipient, *Awarded to only 11 engineering students at WUSTL* April '18

Girls Who Code, Wash U – Curriculum Chair, *Teaching girls in local schools programming in a project-oriented manner, to attempt bridging the gender gap in the tech community. Curriculum Chair specifically is in charge of creating all training materials for the facilitators/teachers and the students* Aug '17 Onward

Women in Computer Science, Wash U – Member Jan '17 Onward