# MAHIMA AGRAWAL

mahima.agrawal@tufts.edu | (469) 226-6812 | 5040 Charles Place, Plano, TX 75093

#### **EDUCATION**

Tufts University Medford, MA

B.S. in Computer Science (CS), Community Health (CH)

May 2020

• **GPA:** 3.73/4.00

• Dean's List: Fall 2016 - Present

The Hockaday School for Girls

Dallas, TX
June 2016

High School Diploma

• GPA: 3.67/4.00 SAT: 2290 ACT: 36

• Awards: National Merit Finalist, Presidential Award Semifinalist

# **PROJECTS**

# Datavant, Inc.

• Data Surfacing and Visualizations (Programmed with Python, JavaScript, HTML)

Jun - Aug 2019

- Consolidated site and customer activity into one dashboard with filter, text search, and pagination, for the first time allowing customer and sales team to understand how the features of the site are utilized.
- Built an end to end email subscription service to allow clients to receive real time alerts on activity regarding their data, surfacing information in an accessible manner and removing the client burden of a 5 click navigation to the activity page.
- Engineered data visualizations to quickly synthesize complicated pieces of information and surface relevant insights, optimizing queries to retrieve information from datasets with millions of rows in real time.
- Disease Outbreak Tracker (Programmed with Python, JavaScript, HTML)

Aug 2019

• Led front end development of a web application prototype for a future company use case, tracking passengers across transit data and generating visualizations of flight patterns to identify potential locations of disease outbreak

#### National Institutes of Health, Clinical Center

Research Poster, Psychosocial Interventions for Treatment Adherence among People Living with HIV/AIDS

Aug 2018

• A literature review of various treatment modalities to address treatment non-adherence and non-compliance of care among people living with HIV/AIDS with a focus on psychosocial factors, specifically social support, mental health, and health literacy.

#### Coursework

• Emulator for Universal Machine (Programmed with C)

Apr 2018

Image Compression and Decompression Program (Programmed with C)
 Medication Adherence Tracking Application (programmed with React Native)

Mar 2018 Dec 2018

• An application aiming to incentivize adherence to and reporting of doctor prescribed medication by introducing an entertainment and/or gaming element to the process. Features include a network database, a robust local setup, and image recognition tools.

# **PROFESSIONAL EXPERIENCE**

Datavant, Inc. San Francisco, CA

Software Engineering Intern

June 2019-Aug 2019

- Developed client facing software seeking to connect silo-ed datasets of healthcare information with the goal of streamlining the relationship between healthcare and data technology to produce better patient care and health outcomes.
- Completed a project focused on surfacing and visualizing data through database design, SQL, charting libraries, and front end development.

# National Institutes of Health, Clinical Center

Bethesda, MD June 2018 – Aug 2018

- Completed clinical trial research within the Social Work Department regarding treatment adherence, mental health, and the prevalence of drug resistance to HIV, presenting a poster summarizing my findings at the end of the program.
- Interviewed patients, providers, study coordinators, nurses, researchers, and more on their experiences with HIV treatment.

#### Peer Health Exchange

Research Intern

Boston, MA

Coordinator (previous: Leadership Council Member, Senior Health Educator, Health Educator)

Oct 2016 – Present

- Teach health education classes at high schools in the greater Boston area, covering topics such as contraception, consent, and mental health.
- Lead implicit bias trainings, which promote discussions of health as it is influenced by the social-ecological model.
- Assist members new to the organization and mentor them in teaching skills, providing guidance on managing difficult classroom situations.

# **SKILLS**

**Relevant Coursework:** Computation Theory, Cyber Security, Data Structures, Databases, Epidemiology, Global Health, Health Care in America, Health Statistics, Machine Structure and Assembly Language Programming, Programming Languages

Extensive experience: Python, C, C++, SQL; Fluent: JavaScript, HTML, CSS Proficient: ReactNative, Haskell, SML, Scheme Tools and Libraries: Git, Flask, jQuery, Plotly, SQlAlchemy, SQLite, CI/CD, Periscope, LaTeX, John the Ripper, Metasploit