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 - Spring 2020

PROJECTS

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.

Datavant, Inc.
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.

Tufts University
Medication Adherence Tracking Application (programmed with React Native)   *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.

Undergraduate Thesis, "Examining Bias in Machine Learning Tools for the Diagnosis of Attention-Deficit/Hyperactivity Disorder"   *May 2020*
- Reviewed existing machine learning applications to ADHD diagnosis through the context of both the Social Determinants of Health and algorithmic fairness principles.

PROFESSIONAL EXPERIENCE

Fitbit   **San Francisco, CA**
Software Engineer   *June 2021-Present*
- Develop, implement, and maintain DAO and API services in Java as part of a menstrual health tracking mobile application with support for cycle tracking, period and fertility predictions, and symptom logging.
- Implement Android UIs and APIs in Kotlin to support key user journeys related to content education, data collection, and data visualization.

Google Health   **Mountain View, CA**
Software Engineer   *July 2020-May 2021*
- Developed APIs across C++, Java, and Dart aimed at supporting users in their health care planning and management journey by connecting health records, personal health goals, and preventive health care tasks in a single mobile application.
- Designed and implemented a relational database pattern to support storage of user supplied health experiences alongside hospital, insurance, and immunization records.

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**
Research Intern   *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   **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