MAHIMA AGRAWAL

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EDUCATION

Columbia University Mailman School of Public Health   **New York, NY**
M.P.H. in Population and Family Health   *2024-2026*
Columbia School of Professional Studies   **New York, NY**
M.S. in Bioethics   *2024-2026*
Tufts University   **Medford, MA**
B.S. in Computer Science, Community Health   *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.

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*
- An analysis of existing machine learning applications to ADHD diagnosis through the context of both the Social Determinants of Health and algorithmic fairness principles.

PROFESSIONAL EXPERIENCE

Google   **San Francisco, CA**
Software Engineer at Fitbit   *June 2021-April 2024*
- Redesigned and implemented database and API suites across 3 backend layers of Fitbit's SaaS mobile and web application for the menstrual health tracking feature, eliminating concurrent transaction issues, expanding test coverage, and improving data persistence of the feature.
- Implemented a base Android UI template and data layer API to support framework for new feature onboarding, now utilized across all features of the Fitbit mobile application to enforce consistent design and data management patterns.
- Implemented iOS UIs in Swift to surface logging features to users, resulting in a 129% increase in period and symptom log actions.

Software Engineer at Google Health   *July 2020-May 2021*
- Developed 2 API suites across C++ and Java to integrate a personal health planning and program feature into a piloted health care management mobile application. Supported real time data retrieval, writing, and editing behaviors as well as pagination and batch actions.
- Designed and implemented a new 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 frontend 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.
- Conducted qualitative interviews with patients, providers, study coordinators, nurses, researchers, and more on their experiences with HIV treatment, synthesizing key findings alongside existing literature on the topic.

Peer Health Exchange   **Boston, MA**
Coordinator (previous: Leadership Council Member, Senior Health Educator, Health Educator)   *Oct 2016 – May 2020*
- Taught health education classes at high schools in the greater Boston area, covering topics such as contraception, consent, and mental health.
- Directed education and development sessions for the organization's Tufts chapter, training over 70 volunteers in concepts regarding implicit bias, classroom management, and public health intervention via the socio-ecological model.

SKILLS

Relevant Coursework: Cyber Security, Databases, Epidemiology, Global Health, Health Statistics, Machine Learning
Extensive experience: C, C++ Java, Kotlin, Python, SQL; **Fluent:** CSS, Dart, HTML, Javascript, R, Swift **Proficient:** ReactNative
Tools and Libraries: Bootstrap, Git, Flask, Jenkins CI/CD