# Mayank Daruka

University of Texas at Austin, Austin, TX 78712 • (346) 368-4085 • mayankdaruka@utexas.edu

linkedin.com/in/mayankdaruka • github.com/mayankdaruka • mayankdaruka.github.io

# **EDUCATION**

#### The University of Texas at Austin, Austin, TX

May 2023

- Bachelor of Science in Computer Science and Mathematics
- GPA: 3.97
- Interests: Full-Stack Web/Mobile App Development, Deep Learning, Natural Language Processing, Data Science
- Relevant Coursework: Data Structures, Discrete Math, Multivariable Calculus, Computer Architecture, Linear Algebra
- Programming Languages: Java, Python, C, JavaScript, HTML/CSS, SQL, Dart
- **Technologies:** Flask, ReactJS, NodeJS, React Native, Tensorflow, Keras, Pandas, Firebase, ExpressJS, MongoDB, Git, Flutter, Scikit-Learn, Linux, WSL

# **ACADEMIC PROJECTS**

#### Styudor - Sole Developer/Creator (Android and iOS)

May 2020 - Present

- Mobile interface with extensive UI/UX, created with Flutter, designed to connect students in need of tutoring in GRE, MCAT, LSAT, and GMAT with highly qualified tutors in surrounding areas facilitates face-to-face higher quality learning
- Implemented SMS phone authentication with Firebase, created REST API to fetch data with NodeJS, ExpressJS, used MongoDB Atlas for server backend/data storage, utilized Google Maps API to display relative locations of users

### Laundry Line - Developer/Creator (Android and iOS)

Feb 2020 - Present

- Developed a cross-platform app using React Native for UT students that solves laundry-related issues in college dorms
- Utilized Firebase for user authentication, email verification, and Firebase's Cloud Firestore for data storage
- Extensive UI/UX that displays the real-time status of laundry machines on each floor and allows texting individualized for students living on the same floor using the GiftedChat API; management of data flow using Redux

#### Red Meter - Sole Developer/Creator

Apr 2020 - Present

- Built and deployed a webpage with Flask that extracts patterns and analyzes Texan sentiments about Trump with NLP
- Streamed tweets regarding Trump in real-time to a Pandas dataframe; used SQLite3 to manage CRUD operations
- Trained a Keras RNN model with 1.6 million tweets and Word2Vec embeddings in Tensorflow to detect polarity in texts
- · Performed sentiment analysis on real-time data with the ML model and updated statuses of cities accordingly

#### Kinetic Keys (Computer Real-Time Vision) - Developer/Creator

Jan 2020 - Mar 2020

- Created an interactive browser-based interface with ReactJS and Material UI components that utilizes a webcam, allowing the user to make alphabet-like poses to create letters that spell out words (kinetickeys.netflify.com)
- ullet Incorporated a Tensorflow Machine Learning model that was trained with  $\sim\!5000$  images to recognize human poses
- Showcased product and presented demo to company recruiters/engineers at Texas Convergent Side Project Expo 2020

#### LEADERSHIP, ACTIVITIES, AND EXPERIENCE

**Dive Chat,** *Software Engineering Intern* | *Austin, TX* 

May 2020 - Present

- Built web and mobile interfaces of channel-based messaging app (main product) with development team from ground up
- Responsible for front-end and back-end, maintaining security rules and carrying out user data analysis
- Implemented push notifications, social calendar, contact integration, asset bundling/caching, conversation encryption
- Tech stack: ReactJS, React Native, Redux, Expo, NoSQL, Firebase, Hotjar, Google Admob

#### **Texas Convergent - UT Austin,** Build Team Technical Developer | Austin, TX

Feb 2020 - Present

- Worked on a 4-month project to create a mobile budgeting application using React Native that oversees users' finances, displays their transaction records, and maintains a system for tracking item returns
- Used the Back4App Parse Server REST API for database operation queries and user management
- Learned to build and design tech prototypes, business proposals, and pitches under the guidance of experienced leads

# **S.A.M. Singapore Math**, Math Instructor | Sugar Land, TX

Jun 2018 - Sep 2018

Tutored Mathematics to 8th grade students using the Socratic method, and managed the daily activities of the center

#### **OTHERS**

Hackathons Attended: HackTX 2019, LeapHacks 2020, SummerHacks 2020

Honors and Awards: National AP Scholar; National Merit Commended Scholar; Siemens Foundation Merit Scholar

**Training/Certifications:** AWS Machine Learning

Work Authorization: Eligible to work in the US with no restrictions