Mayank Daruka

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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

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
- Carried out user data analysis and maintained security rules to prevent data modification/stealing
- Implemented push notifications, social calendar, contact integration, asset bundling/caching, conversation encryption
- Tech stack: ReactJS, React Native, Redux, Expo, NoSQL, Firebase (Realtime Database, Cloud Storage), Hotjar, AdMob

Texas Convergent – UT Austin, *Build Team Technical Developer | Austin, TX*   **Feb 2020 – May 2020**
- 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 – product presented on Demo Day
- Used the Back4App Parse Server REST API for database operation queries and user management/authentication
- 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

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)
- Incorporated a Tensorflow Machine Learning model that was trained with ~5000 images to recognize human poses
- Showcased product and presented demo to company recruiters/engineers at Texas Convergent Side Project Expo 2020

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