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:** 3.93
- **Interests:** 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, MongoDB, Git, Flutter, Scikit-Learn, Linux, Windows Subsystem for Linux

ACADEMIC PROJECTS

Studyor – Sole Developer/Creator (Android and iOS)   **May 2020 – Present**
- Mobile interface, created with Flutter, designed to connect students in need of tutoring in GRE, MCAT, LSAT, GMAT, and other standardized tests with highly qualified tutors in surrounding areas – facilitates person-to-person tutoring
- SMS phone auth. with Firebase, REST API created with NodeJS, ExpressJS, MongoDB for server backend/data storage

Laundry Line – Developer/Creator (Android and iOS)   **Feb 2020 – Present**
- Developed a cross-platform app using React Native and Redux for UT students that solves laundry-related issues in college dorms. Utilized Firebase for user authentication, email verification, and 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

Red Meter – Sole Developer/Creator   **Apr 2020 – Present**
- Developed a web application with Flask to depict sentiments of 5 Texan cities about Donald Trump using 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 that utilizes a webcam, allowing the user to make alphabet-like poses to create letters that spell out words
- Incorporated a Tensorflow Machine Learning model that was trained with 4500 images to recognize human poses
- Showcased product and presented demo to company recruiters/engineers at Texas Convergent Side Project Expo 2020

MNIST Handwritten Digit Recognition   **Jan 2020 – Feb 2020**
- Developed and deployed a Convolutional Neural Network to carry out the image classification of thousands of handwritten digits acquired from the MNIST Database, using the Tensorflow.js Layers API
- Trained the model using 55,000 images and monitored in-browser training of the CNN through the Tensorflow.js Vis API

LEADERSHIP, ACTIVITIES, AND EXPERIENCE

Texas Convergent – UT Austin, *Build Team Technical Developer*   **Feb 2020 – Present**
- Designed a mobile budgeting application using React Native and Expo 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 operations and user management
- Learned to build and design tech prototypes, business proposals, and pitches under the guidance of experienced leads

Association for Computing Machinery – UT Austin, *Member*   **Sep 2019 – Present**
- Strengthened my ability to work with Linux, WSL, terminal basics, Git and Version Control Systems

S.A.M. Singapore Math, *Math Tutor*   **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