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

LaundryLine - Developer/Creator

Feb 2020 - Present

- Developed a cross-platform app using React Native for UT students that solves laundry-related issues in college dorms
- 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
- Release scheduled on App Store and Google Play Store in Fall 2020/Spring 2021
- Utilized Firebase for user authentication, email verification, and data storage

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 alphabetlike 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

Red Meter - Developer/Creator

Apr 2020 - Present

- Developed a web application with Flask to depict sentiments of 5 Texan cities about Donald Trump
- 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

Scrilla (Texas Convergent Finance Tech Build Team) - Developer/Creator

Jan 2020 - Present

- Designed 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 operations and user management

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 Developer

Feb 2020 - Present

- Worked on a semester-long project as part of the Personal Finance Tech Build Team to design a budgeting product
- 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

Interests: Ping Pong, Tennis, Cricket, TV Shows

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