# Mayank Daruka

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#### **EDUCATION**

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

May 2023

- Bachelor of Science in Computer Science and Bachelor of Science in 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 Organization and Architecture, Introduction to Probability and Statistics, Linear Algebra

**Technical Skills:** Microsoft Office. Java, Python (NLTK, Tensorflow, Keras, Flask), C, JavaScript (NodeJS, ReactJS, React Native), HTML/CSS, x86-64 Assembly.

#### ACADEMIC PROJECTS

#### LaundryLine - Developer/Creator

- Developed a mobile application that solves issues UT students face with laundry in dorms through crowdsourcing users can update/check the real-time status of washers and dryers on their residence floor to prevent unnecessary trips to the laundry room
- Mobile application interface compatible with both iOS and Android platforms; release scheduled for Fall 2020/Spring 2021
- Front-end: React Native, cross-platform UI component toolkits (NativeBase) making for an extensive user interface
- Back-end: User authentication and email verification with Firebase, storage of user and laundry machine states data in cloudbased database Firestore, management of data flow relied on by server and client sides using Redux, real-time customized group chatting and texting individualized for each residency floor through Firebase's Realtime Database

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

- Created and trained a Machine Learning model with approximately 4500 images to recognize human alphabet-like postures
- Worked with ReactJS, employed results from the PoseNet model, and utilized Material UI Library API components to design an interactive browser-based interface (kinetickeys.netlify.com) where one can spell out words by creating letters with their body
- Showcased project and presented demo to company recruiters and engineers at the Texas Convergent Side Project Expo 2020

#### Red Meter - Developer/Creator

- Developed a web application with Flask to display sentiments of Dallas/FW, Houston, San Antonio, and Austin about Trump
- Used the Tweepy API to stream tweets regarding Trump in real-time to a database; 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 displayed by the Mapbox API

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

- Designed a mobile budgeting application using Expo, React Native, and Back4App Parse REST API that oversees users' finances, displays their transaction records, and maintains a system to handle returning bought items before the return deadline
- Back-End: User authentication and email verification (automated emails) through Parse Server's Users API, JSON encoded data storage in real-time cloud-based Back4App database

# Daily News Bot - Developer/Creator

- Developed a Slack bot in Python that provides me with daily news about the world's current affairs in real time
- Used the BeautifulSoup library to scrape data from various news websites, and the Slack RTM API for Real Time Messaging

## 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, Windows Subsystem for Linux, terminal basics, Git and Version Control Systems S.A.M. Singapore Math, *Math Tutor*Jun 2018 – Sep 2018

• Tutored Mathematics to students up till 8<sup>th</sup> grade using various approaches used by schools in Singapore. Managed the day-to-day activities of the center and handled the technology-related tasks of the workplace.

# **OTHERS**

**Languages:** English, Hindi, Spanish (Elementary Proficiency) **Hackathons Attended:** HackTX 2019, LeapHacks 2020

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