# MAYANK DARUKA

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## **EDUCATION**

### The University of Texas at Austin

May 2023

Bachelor of Science in Computer Science and Mathematics

GPA: 3.97

Relevant Coursework: Data Structures, Computer Architecture, Operating Systems, Competitive Programming, Linear Algebra, Multivariable Calculus, Discrete Math (both Math and CS versions), Differential Equations

#### **EXPERIENCE**

#### **Dive Chat**, Software Development Intern, Austin, TX

May 2020 - Aug. 2020

- Built mobile interface of channel-based messaging app for college students with React Native and Redux
- Constructed Firebase data security rules, improved guery speeds by 30% through caching and database optimizations
- Allowed for more efficient data retrieval and processing by incorporating Redux-Thunk and Redux-Persist
- Implemented heavy backend for group/event creation, deep linking, asset bundling, and conversation encryption
- Integrated iOS and Android push notifications using NodeJS and Google Cloud Platform
- Mobile application received around 5000 downloads within the first week of product launch

#### **Big and Mini**, Full-Stack Software Engineer, Austin, TX

June 2020 - Aug. 2020

- Built a web video-calling platform using Jitsi and NextJS that facilitates interaction between the youth and older generations to mitigate social isolation and loneliness amongst older adults
- Created automated email reminder systems for over 2400 users using NodeJS functions deployed to AWS Lambda
- Constructed an algorithm in Java to match users based on available times, interests, and personal preferences
- Developed back-end of a cross-platform mobile application with AWS Lambda, DynamoDB and Cognito

#### **Texas Convergent**, Build Team Technical Lead, Austin, TX

Feb. 2020 - May 2020

- Developed a budgeting application that handles user finances and maintains a system for tracking item returns with React Native and Parse REST API
- Presented tech prototype and pitched the product to over 200 company recruiters, engineers, and school alumni

## **PROJECTS**

# Laundry Line (iOS and Android Application)

Feb. 2020 - Current

- Developed a mobile application using React Native and Firebase that solves laundry-related issues in UT dormitories
- Extensive UI/UX that displays the real-time status of laundry machines and allows for individualized texting amongst students on each floor of the dormitory

# Red Meter (Natural Language Processing)

Apr. 2020 - May 2020

- Built webpage with Flask that extracts patterns and analyzes sentiments about Trump with Natural Language Processing
- Cleaned and performed feature extraction on real-time tweets using several Python libraries (NumPy, Pandas etc.)
- Trained a Keras model with 1.6 million tweets and Word2Vec embeddings in Tensorflow to detect polarity in texts
- Achieved 79% accuracy in predicting text sentiments using trained Recurrent Neural Network model

#### Kinetic Keys (Computer Real-Time Vision)

Jan. 2020 - Mar. 2020

- Created interface with ReactJS that uses a webcam to detect English alphabet letters in human poses to spell out words
- Incorporated a Tensorflow ML model that was trained with 5000+ images to recognize 9 unique human poses
- Showcased product and presented demo to company recruiters/engineers at Texas Convergent Side Project Expo 2020

# **SKILLS**

PROGRAMMING LANGUAGES: Java, Python, C, JavaScript, HTML/CSS, Octave

FRAMEWORKS: ReactJS, NodeJS, Flask, React Native, Flutter, Tensorflow, Keras, Firebase, MongoDB, AWS