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 query 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 and event creation, deep universal 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)

Dec. 2019 - Feb. 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