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 Mathematics, Differential Equations

EXPERIENCE

Dive Chat, *Software Development Intern*, Austin, TX May 2020 - Aug. 2020
- Built mobile interface of channel-based messaging application for college students with React Native, Redux, NodeJS, and Google Cloud
- Constructed Firebase data security rules, improved query speeds by 35% through caching and database optimizations
- Implemented heavy back-end for group chat and event handling, real-time messaging, asset bundling, and conversation encryption
- 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 client dashboard with NextJS and HTML/CSS and implemented back-end functionality with AWS
- Developed and incorporated a video-calling platform using Jitsi to facilitate online meetings between users
- Created automated email reminder systems for over 2400 users in 13 countries using NodeJS functions deployed to AWS Lambda
- Constructed an API in Java to automatically match users based on available times, interests, and preferences from DynamoDB

ACTIVITIES

UT IEEE Computer Society, *Software Developer & Member* Sept. 2020 - Current
- Built UT Ticket Exchange, a centralized web platform for UT affiliates to buy/sell tickets for sporting events
- Leveraged the MEAN Stack (MongoDB, ExpressJS, Angular, NodeJS) to develop front-end and back-end of application
- Worked with 15 students in an Agile environment to develop under a microservices architecture model

Texas Convergent, *Build Team Technical Lead* Feb. 2020 - May 2020
- Developed a budgeting product that handles user finances and tracks 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

Omelia (Chrome Extension)
- Created a Chrome extension using JavaScript and HTML/CSS that modifies a Google spreadsheet using recorded commands spoken by user
- Implemented real-time speech to text translation and utilized Google Cloud NLP, GloVe, NLTK and Scikit-learn for text processing
- Built Python RESTful API in Flask deployed to Google Cloud Functions that uses the Google Sheets API to interact with spreadsheets

Laundry Line (iOS and Android Application)
- Developed a mobile application using React Native and Firebase that solves laundry-related issues in UT dormitories
- Extensive UI/UX that displays real-time statuses of laundry machines and allows for individualized texting among students on each floor

Red Meter (Natural Language Processing)
- Built webpage with Flask that uses NLP to provide accurate insights on the outcome of the 2020 Election
- 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 a trained Recurrent Neural Network model and Python libraries (NumPy, Pandas etc.)

Kinetic Keys (Computer Real-Time Vision)
- 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, JavaScript, C, C++, HTML/CSS, TypeScript, Octave
FRAMEWORKS/TOOLS: ReactJS, NodeJS, Angular, Flask, React Native, Flutter, Tensorflow, Keras, Firebase, MongoDB, AWS
INTERESTS: Cricket, Tennis, Traveling, Movies, Music
WORK AUTHORIZATION: Eligible to work in the US with no restrictions