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:** 3.97
- **Relevant Coursework:** Data Structures, Computer Architecture, Operating Systems, Competitive Programming, Discrete Math, Multivariable Calculus, Linear Algebra, Probability and Statistics, Differential Equations
- **Programming Languages:** Java, Python, C, JavaScript, HTML/CSS, SQL, Octave
- **Frameworks:** Flask, ReactJS, NodeJS, React Native, Flutter, Tensorflow, Keras, Firebase, MongoDB, AWS

LEADERSHIP, ACTIVITIES, AND EXPERIENCE

Dive Chat, Inc.
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/event creation, deep linking, asset bundling, and conversation encryption
- Incorporated 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   **Jun 2020 – Aug 2020**
- Built a web + mobile video-calling platform using Jitsi 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 – UT Austin
Build Team Technical Developer | 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 company recruiters and engineers

S.A.M. Singapore Math
Math Instructor | Sugar Land, TX   **Jun 2018 – Sep 2018**
- Tutored Mathematics to middle school and high school students, and managed the daily activities of the center

ACADEMIC PROJECTS

Laundry Line (Android and iOS)   **Feb 2020 – Present**
- 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

OTHERS

Honors and Awards: National AP Scholar; National Merit Commended Scholar; Siemens Foundation Merit Scholar
Work Authorization: Eligible to work in the US with no restrictions