MAYANK DARUKA

EDUCATION

The University of Texas at Austin

May 2023

Bachelor of Science - Double major in Computer Science and Mathematics GPA: 3.96

Relevant Coursework: Data Structures, Computer Architecture, Operating Systems, Algorithms, Competitive Programming, Computer Networks, Neural Networks, Object Oriented Programming, Discrete Math, Linear Algebra

EXPERIENCE

Mastercard, Software Engineer Intern, Arlington, VA

June 2021 - Aug. 2021

- Enhanced health checks, added graceful shutdowns, and wrote automation/unit tests with JUnit and RestAssured framework demonstrating 90% code coverage for Java Spring Boot services in production
- Designed API for downstream services integration that retrieves aggregate health status of over 10 services dynamically in different environments
- Created new Track Intelligence service and programmed functionality for POST call to create bulk discovery requests for users
- Selected as winning submission out of 30+ teams globally for intern challenge regarding a space tourism experience made possible by Mastercard

Dive Chat, Part-Time Software Engineer, Austin, TX

May 2020 - Present

- Led development of mobile and web interface of channel-based messaging app with React Native, Expo, React.js, and Redux
- Constructed Firebase data security rules, improved query speeds by 45% through caching, memoization, debouncing, and database optimizations
- Built heavy and scalable back-end for messaging interface, performance improvements, caching and syncing of persisted user data
- Implemented push notifications, message replies, event reminders, event updates with NodeJS serverless functions deployed to Google Cloud

Big and Mini, Software Engineer Intern, Austin, TX

June 2020 - Aug. 2020

- Built a web client dashboard with Next.js and AWS, and incorporated a video-calling platform using Jitsi to facilitate online user meetings
- Created automated email reminder systems for over 2400 users in 13 countries using Node.js 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 - Dec. 2020

- Built UT Ticket Exchange, a centralized web platform for over 40,000 UT affiliates to buy/sell tickets for sporting events
- Leveraged the MEAN Stack (MongoDB, Express.js, Angular, Node.js) and worked with 15 students in an Agile environment to develop 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

TXPost (Decentralized Blockchain System)

- Developed a decentralized content sharing system with a peer-to-peer network, involving a web application with mining, syncing, and content posting functionalities to interface with blockchain
- Implemented APIs for distributed consensus, SHA-256 block hashing, RSA digital signatures, and a Proof-of-Work mining algorithm

Omelia (Chrome Extension) - HackTX 2020

- Created a Chrome extension using JavaScript and HTML/CSS that modifies a Google spreadsheet using voice commands recorded by user
- Incorporated real-time speech to text translation and utilized Cloud NLP, GloVe, NLTK and Scikit-learn for text processing with 82% accuracy
- Designed Python RESTful API in Flask deployed to Google Cloud Functions that uses the Google Sheets API to interact with spreadsheets

SKILLS

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

FRAMEWORKS/TOOLS: React.js, Node.js, React Native, Angular, Spring Boot, Flask, Tensorflow, Keras, NLTK, Google Cloud, AWS, MongoDB, Jenkins INTERESTS: Full-Stack Engineering, Artificial Intelligence, Data Science, Cloud Computing