Satwik Mallajosyula

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Portfolio: https://next-js-portfolio-delta-one.vercel.app/

EDUCATION

B.S. Computer Science   August 2021 - May 2025
Arizona State University, Tempe, AZ   **GPA: 3.7/4.0**
Relevant Coursework: Data Structures and Algorithms, Operating Systems, Compilers, Machine Learning, Software Engineering, Distributed Software Development, Database Management, Computer Vision

TECHNICAL SKILLS

Languages: C++, C#, JavaScript, TypeScript, Python, Java, C, HTML, CSS, SQL
Developer Tools: Git, Jira, VS Code, Eclipse, IntelliJ, Postman, GitHub
Technologies/Frameworks: React, Redux, Spring Boot, Django, Express.js, Node.js, Linux, Docker, MongoDB, AWS

PROFESSIONAL EXPERIENCE

Axio AI (Primer), Tempe, AZ: Software Engineering Intern   May 2024 - Present
- Designed and implemented over **20** reusable, scalable, and visually appealing front-end components in **React Native**, enhancing the user experience and reducing development time.
- Established and maintained **GraphQL APIs**, ensuring efficient data retrieval and manipulation, catering to **10000+** concurrent users.
- Increased app performance by **15%** through optimization of state management by using **Reducers** and **Context API**.
- Improved RAG model performance by **25%** with **knowledge graphs**, enhancing accuracy of **AI** responses.

Arizona State University, Tempe, AZ: Undergraduate Research Assistant   March 2024 - Present
- Incorporated **Whisper v3 large** model to analyze over **1000** ambulance to hospital emergency audio call recordings and transcripts to enhance the transcription quality.
- Developed **Python** scripts to overlay background noise into 911 call recordings, producing mixed audio files to simulate real-world scenarios and bolster transcription model robustness.

RELEVANT PROJECTS

Schedul.io | Groq AI, Llama3, Next.js, Convex, Cartesia AI, Whisper   June 2024
- Led a team of **4** people to develop an **AI phone call assistant** for small businesses powered with **Groq AI**, **Llama3**, **Whisper** and **Cartesia AI**, managing customer bookings seamlessly leveraging **Groq AI's** tool calling and google calendar integration.
- Implemented synchronization between customer bookings and owners' Google Calendars, resulting in a **40%** reduction in scheduling errors and improved operational efficiency.
- Architected and deployed a comprehensive dashboard using **Next.js** and **Convex**, enabling business owners to visualize and manage calendar appointments and analyze customer phone call summaries.

Bitcoin Value Predictor | Python, PyTorch, Pandas, Scikit, NumPy   April 2024
- Extracted and preprocessed a dataset of **3000+** Instances using **Pandas** and **Scikit**, implementing standardization of input features and split the dataset into training (**0.6**) and testing (**0.3**) sets.
- Spearheaded the development of an **RNN** model using **PyTorch** and trained the model achieving an average loss of **0.02**.
- Evaluated the trained model on test set and attained an **R2** score of **0.997** indicating strong predictive capability of the model.

Readers Retrieve | React.js, Tailwind CSS, JavaScript, Django, PostgreSQL   November 2023
- Engineered an e-commerce platform, bringing a unique and tailored online bookstore experience.
- Executed Image storage of over **1000** books in the catalog leveraging **Amazon Web Services** S3 bucket.
- Launched a responsive and modern front-end using **React.js** and **Tailwind CSS** displaying **200+** books.
- Integrated **PostgreSQL** as the **RDBMS** ensuring swift retrieval and storage of product information, user data, and transaction details.

ACHIEVEMENTS
- Won **2nd Prize** in the 19th Annual Programming Competition hosted by WICS.
- NAMU Scholarship Recipient (**$15,500** annually).
- Placed in Dean's List (Fall 2021, Spring 2022, Spring 2023, Spring 2024).