Poojith Kumar Reddy Madduru

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Education

University at Albany, SUNY — **Albany, NewYork**
Master's in Computer Science — *Aug 2023 – May 2025*

Sree Vidyanikethan Engineering College — **Tirupathi, India**
Bachelor of Technology in Electronics and Communication Engineering — *Aug 2019 – May 2023*

Technical Skills

Languages, Web Technologies: Python, React-Native, JavaScript, HTML5, Tailwind CSS, Java, C, SAS, R, SQL.
Databases: MySQL, MongoDB, Oracle, DBMS
Tools, Libraries, Frameworks: ReactJS, NextJS, NodeJS, PL/SQL, Pandas, .NET, VS Code, Power BI, GitHub
Cloud Technologies: AWS(EC2, S3, Lambda), Docker, Google Cloud Platform.

Experience

Full Stack Developer — **April 2022 – June 2023**
Intelliza | *JavaScript, ReactJS, Node.JS, MongoDB, AWS(EC2)*

- Developed and deployed dynamic full-stack web applications using JavaScript, React.js, Node.js, MongoDB, and AWS (EC2) with high performance, scalability, and efficient data handling. Designed robust architectures to support seamless user interactions. Implemented state management using useState, useReducer, and Context API for improved reactivity. Optimized component performance and minimized unnecessary re-renders for enhanced application responsiveness with structured data flow.
- Integrated RESTful APIs with useEffect hooks for real-time data fetching, caching, and synchronization. Ensured smooth API consumption, reducing loading times. Enhanced user interaction speed and efficiency by 90%. Designed and managed complex routing with React Router and dynamic routing for seamless navigation. Implemented nested routes for a structured user experience. Improved page transitions and component rendering efficiency.
- Optimized backend performance by implementing asynchronous operations with Node.js and Express.js. Utilized async/await, middleware, and error handling to enhance API efficiency. Reduced response time by 75% through load balancing and optimized queries.
- Utilized MongoDB as Database and leveraged AWS EC2 for scalable deployments with auto-scaling and load balancing. Ensured high availability, security, and minimal downtime. Configured infrastructure to handle large traffic loads efficiently. Created interactive dashboards and reports using Tableau, Power BI, OBIEE, and statistical software (SPSS, SAS), enhancing decision-making accuracy by 90%.

Python Developer — **June 2021 – March 2022**
Verzeo, Intern | *Python, NumPy, Pandas, SQL* — *Banglore, India*

- Developed and optimized data-driven applications using Python, leveraging NumPy and pandas for efficient numerical computing and data manipulation. Utilized Python's object-oriented programming to design scalable architectures, ensuring high performance in data-intensive workflows. Integrated Python with REST APIs to automate data processing tasks and streamline workflows. Automated data processing pipelines and ETL workflows using Python, SQL, and Pandas, ensuring smooth data ingestion and transformation. Developed scripts for data cleaning, preprocessing, and anomaly detection, improving data quality by 90%. Leveraged multithreading and multiprocessing to handle large-scale datasets efficiently.

Projects

University Rater System | *TypeScript, NextJS, Node.JS, MongoDB, Docker, AWS*

- Implemented dynamic UI with React, state management with Context API, and optimized API calls using Axios and useEffect hooks, ensuring smooth user interactions. Deployed the system with Docker containers on AWS EC2 for high availability and reliability. Developed a university comparison and rating feature with dynamic filtering, real-time data aggregation, and personalized user interactions.
- Optimized MongoDB queries and indexing for efficient data retrieval. Integrated an AI-powered chatbot using Node.js and NLP libraries to provide instant responses and assist users in navigation. Designed a modular chatbot architecture with RESTful API integration, enabling automated responses to user queries. Improved user engagement and response accuracy by leveraging machine learning-based text analysis.

Class Connect | *JavaScript, ReactJS, Node.JS, MongoDB, Docker, AWS*

- Enabling seamless interaction between students and teachers, implemented AI-powered moderation to detect abusive language, ensuring a safe and respectful environment. Automated frequently asked question pinning based on frequency analysis to enhance visibility and engagement.