Praneeth Ravuri

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EDUCATION

GEORGE MASON UNIVERSITY — Fairfax, VA
Master of Science in Computer Science — Aug 2022 – May 2024
Coursework: Data Analytics, Machine Learning, Distributed Systems

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY — Hyderabad, India
Bachelor of Technology in Computer Science — Jun 2018 – May 2022
Coursework: Cybersecurity, Software Testing, Cloud Computing, Object-Oriented Programming, Operating Systems

SKILLS

Programming Languages: Python, Golang, JavaScript/TypeScript, C/C++, Bash
Web Technologies: React, Next.js, HTML/CSS, Tailwind CSS, FastAPI, Node.js, Express.js, WebSocket, Axios
Databases: MySQL, MongoDB, Redis
Machine Learning: Scikit-learn, TensorFlow, PyTorch, Pandas, NumPy, Matplotlib
DevOps and Cloud: Docker, Kubernetes, AWS Lambda, EC2, Jenkins, Vercel, GCP BigQuery
Methodologies: Agile/Scrum, Test-Driven Development (TDD), Software Development Lifecycle (SDLC), Version Control
Soft Skills: Communication, Collaboration, Leadership, Problem-Solving, Critical Thinking, Adaptability, Time Management

WORK EXPERIENCE

PRODAPT — Richardson, TX
Software Engineer — Oct 2024 – Present
- Architected high-throughput data pipelines using Golang through cross-functional collaboration with network teams, processing metrics from 5,000+ devices.
- Configured custom decoders for 170+ device metrics, ensuring consistency in network monitoring.
- Automated error recovery with Python scripts, minimizing downtime and data loss during critical failures.
- Built unit and integration tests to handle 1M+ JSON objects/hour, ensuring pipeline reliability.
- Optimized database operations with MongoDB and BigQuery batch processing, reducing write latency and overhead.
- Streamlined CI/CD workflows using Jenkins, increasing deployment efficiency and reducing manual effort.

COGNIZANT — Hyderabad, India
Software Engineer — Jun 2021 – Jun 2022
- Developed a WebSocket-based real-time messaging platform for 500+ users, enabling low-latency communication.
- Enhanced RESTful API performance with Redis caching and connection pooling, achieving message delivery times below 50 ms.
- Containerized and deployed 10 microservices using Docker and Kubernetes, orchestrated through AWS Lambda.
- Collaborated with Agile teams of 12+ members to meet client requirements and deliver on tight timelines.
- Integrated OAuth 2.0 for user authentication, reducing unauthorized access attempts.

PROJECTS

LLM Chat Application
- Built a full-stack web application enabling real-time interactions with 10+ Hugging Face open-source LLMs, featuring model selection, chat history persistence via MongoDB, and a responsive UI using React and Tailwind CSS.
- Engineered a REST API MVC backend with FastAPI to handle model inference pipelines, leveraging PyTorch for runtime optimization and NLTK for text preprocessing to achieve a 1.2-second average response time.

Smart Traffic Management System
- Developed an AI-driven traffic optimization system using Pandas for time-series data analysis and Matplotlib for congestion heatmaps to dynamically adjust signal timings.
- Trained Q-learning models using Scikit-learn with NumPy state matrices, reducing peak-hour wait times from 60 seconds to 25 seconds.