

ROHAN REDDY MELACHERVU

SDE-1

@ rohan.reddy.melachervu@gmail.com

+91 9845951056

Bengaluru, India

in linkedin.com/in/rohan-reddy-melachervu

EXPERIENCE

SDE-1

Webknot Technologies Pvt Ltd.

Oct 2022 – Present

Bengaluru, India

- Architected and implemented **serverless, cloud-native** solutions for **HDFC Bank**, optimizing development processes and significantly reducing costs. Suggested and implemented cloud-native solutions to the company, resulting in a **30% cost reduction**. Developed and deployed multiple microservices using **Java Spring Boot**, ensuring secure communication through **gRPC** connections and implementing encryption measures for maximum security.
- Utilized **AeroSpike** as a cache solution and conducted thorough real-world performance testing with **100K users**, achieving remarkable results with response times as low as **0.4 seconds**.
- Engineered a backend application using **NestJS, AWS SQS, Postgres** for a **healthcare application**, ensuring top-tier performance, scalability, and security through meticulous adherence to industry-leading practices. **Reduced project costs** significantly by choosing **AWS SQS** for asynchronous communication between services instead of Kafka.
- Streamed **real-time** video footage from Raspberry Pi robots across the globe using **AWS Kinesis**, demonstrating expertise in implementing scalable and efficient solutions for global video streaming applications.

TECHNICAL SKILLS

Backend:

- Spring Boot, Django, NestJS
- AWS, GCP
- Kafka, RabbitMQ, gRPC, WebSockets

Frontend:

- React, NextJS
- Redux, Tailwind CSS, MUI

Programming Languages:

- Java, Python, TypeScript, Golang
- SQL

Tools:

- IntelliJ, VSCode
- AWS Console, GCP Console
- Jenkins, Github Actions, Kubernetes, Docker

HACKATHON PROJECTS

TimeWise: Automated Timesheet Wizard

- Developed a **GitHub App** to transmit GitHub activity to a **Webhook** server and orchestrated a NestJS server using **OpenAI API** for autonomous summarization of developer activities, populating a PostgreSQL Database with valuable insights.
- Implemented a **CRON job** for scheduled reporting, generating comprehensive daily reports in Excel format, and received the prestigious **Tech Expertise accolade** for outstanding innovation and impact during a hackathon.

EDUCATION

B.Tech (Computer Science Engineering)

Vellore Institute of Technology, Chennai

Chennai, Tamil Nadu

- CGPA: 8.35

Relevant Course work

- Data Structures and Algorithms, Networks, Parallel and Distributed Computing, Operating Systems, Web Mining, Database Management Systems, Natural Language Processing, Internet and Web Programming, Big Data Processing.

ACADEMIC PROJECTS

EvaluMastery: Subjective Answer Assessment Pro

- Developed a Flask-based auto-evaluation app utilizing NLP techniques, including cosine similarity, Jaccard similarity, and keyword extraction, to determine the best metric for matching uploaded answers with correct ones.
- Leveraged NLP methodologies to create a precise auto-evaluation system within a Flask app, employing cosine and Jaccard similarity, as well as keyword extraction, to optimize answer matching.

SolarCast: Advanced Solar Power Forecasting

- Conducted solar power prediction on the Standard Benchmark Solar Power dataset, employing time series analysis and decomposition techniques in Python.
- Achieved an LSTM R2 score of 0.78, demonstrating strong predictive accuracy in solar power forecasting using advanced analytical methods.

ACHIEVEMENTS

- Received Tech Wizard award consecutively for 3 months in a row.
- Received Team Spot award for excellent performance at HDFC Bank.

HOBBIES

- Guitar (Electric and Acoustic)
- Lawn Tennis, Trekking, Table Tennis, Football, Basketball