ROHAN REDDY MELACHERVU

Email: rohan.reddy.melachervu@gmail.com | Mobile: +91 98459 51056

Passionate, swift, adaptable, and result-focused learner. Insightful, studious, distinctive analytical and logical skills combined with proficiency in programming languages. Toils towards transforming human society leveraging cutting-edge technologies.

Professional Links

- Linkedin - https://www.linkedin.com/in/rohan-reddy-melachervu-326b74219
- GitHub – https://wwww.github.com/rohanreddymelachervu
- LeetCode - https://leetcode.com/bruhan_reddy/

TECHNOLOGY STACKS

Stacks/Architectures/Framework:	*Spring Boot, Apache Spark, Apache Hadoop, Django, Flask, Firebase, React, NestJS, NextJS, Redux, Tailwind CSS, Material UI*
PaaS/IaaS:	*AWS CFT, Terraform*
Big Data:	*Hadoop, Spark, Kafka, RabbitMQ*
AI/ML	*Linear Regression, LSTM, SVM, KNN*
Databases:	*MySQL, PostgreSQL, NOSQLs – Redis, MongoDB, AeroSpike*
Web:	*WebSocket, Apache Tomcat, WSGI, Webhooks*
DevOps:	*Jenkins, Github Actions, BuildKite*
Operating Platforms:	*Windows, Kali Linux, Ubuntu, MacOS*
Development Environments:	*Visua Studiol Code, IntelliJ, Jupyter, GitHub, Bitbucket, JIRA, CI/CD, Containers, VMs, Docker, Postman, Insomnia*
Programming Languages:	*Python, JavaScript, Java, MySQL, Golang, C, C++, Typescript*
Execution Process:	*Scrum, Rapid, Agile*

EXPERIENCE

Jan'11 – Present

SDE, Webknot Technologies — **Bengaluru, India (hybrid)**

- Collaborated with prominent clients including **Render Networks, Jatya Tech,** and **HDFC**, assuming full ownership of projects in both **Full-Stack and DevOps** domains, and consistently delivered exceptional results to showcase.
- Led the implementation of robust CI/CD pipelines for Python backend code, enabling seamless deployments across diverse environments using Jenkins, streamlining development workflows for enhanced efficiency.
- Engineered backend REST APIs in **NestJS** for a healthcare application, meticulously adhering to industry-leading coding practices, technologies, and methodologies. Demonstrated unwavering commitment to delivering top-tier performance, scalability, and security by implementing Role-Based Access Control (RBAC) and Attribute-Based Access Control (ABAC) measures. Used **RabbitMQ** for **asynchronous** communication between services.
- Developed CI/CD pipelines for **AWS Lambda** functions using **github actions** and the sst (**serverless**) framework.
- Engaged in screen design, seamlessly integrating state management, and adeptly interfacing APIs within a **Next.js** with **TypeScript** environment to ensure a cohesive and responsive user experience. Played a pivotal role in the frontend development by harmonizing design elements with dynamic data retrieval for optimal user interactions.
- Led a successful proof-of-concept (POC) initiative to implement a rate limiting mechanism for a **Spring Boot** Application, limiting access to its endpoint to three times a day. Employed **AeroSpike** as a cache solution and rigorously tested its performance under real-world conditions with 10,000 users, achieving exceptional results with response times as low as **0.4 seconds**. Used gRPC to communicate between various REST services.

Oct'22 – Jan' 10

Python Developer (Intern), Webknot Technologies — **Bengaluru, India (remote)**

- Worked with multiple clients in big projects including ETL, Data Engineering, Back End Development.
- Worked with Pandas (Python) to pre-process and modify datasets.
- Worked with Firebase to deploy functions with NodeJS.

June'22 – July'22 **Project Intern, Naldeo Technologies & Industries** **France (remote)**

- Time Series Decomposition and mapping of Congestion values with Solar Grid Power

Jan'22 – Apr'22 **Department of Health & Family Welfare, Govt of AP** **Amaravati, AP, India (remote)**

- Performed Data Analysis using Forecasting and Data Visualization on Cancer cases dataset
- Data Cleaning and VLook-Up on the dataset

ACADEMIC PROJECTS

Subjective Answer Evaluation

- Created a Python app using Flask which can auto evaluate an uploaded answer
- Used NLP techniques such as cosine similarity, Jaccard Similarity, Key word extraction and matching
- Codebase - https://github.com/rohanreddymelachervu/Subj-Ans-Eval-NLP-

Bitcoin Price Notifier

- Created a Bitcoin price notifier using Python Flask which reads the bitcoin price every 10 seconds and when price hits a certain value entered by user, sends an email to the user using Redis. Also integrated an embedded DB along with SQLAlchemy
- Database used: SQLITE
- Codebase - https://github.com/rohanreddymelachervu/BitCoin-Notifier

Solar Power Prediction

- Solar power prediction on Standard Benchmark Solar Power dataset
- Time series analysis and decomposition using Python
- LSTM R2 score 0.78
- Codebase - https://colab.research.google.com/drive/1uh0Z3fRsco2ruvd_8DT-muXNB-F75qtS?usp=sharing

HACKATHON PROJECTS

Automate Timesheet Generation

- **Developed a GitHub App**: Engineered a GitHub App capable of transmitting commit messages, Pull Request comments, and status updates as payloads to a dedicated Webhook server.
- **AI-Powered Summarization**: Orchestrated a NestJS server that employed the OpenAI API to autonomously summarize daily developer activities. This solution was designed to extract valuable insights from commit messages and PR comments, subsequently populating a PostgreSQL Database.
- **Scheduled Reporting**: Implemented a CRON job to execute at midnight, generating comprehensive daily reports in Excel format, highlighting developer activities and summaries.
- **Recognized Excellence**: Awarded the prestigious Tech Expertise accolade in acknowledgment of the project's outstanding innovation and impact during the hackathon, especially for the rigorous data modelling and schema design of the project in just 2 days.

EDUCATION

B. Tech - 2019-23	**Computer Science and Engineering** **Vellore Institute of Technology, Chennai, India** 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.	**CGPA 8.35/10**
10+2 (PUC) - 2017-19 (CBSE)	**Mathematics, Physics, and Chemistry** **Sri Chaitanya Techno School, Bengaluru, India**	**88.4%**
SSC – 2016-17 (CBSE)	**Math, Sciences, Social Studies, English, Hindi**	**CGPA 9.6**

PERSONAL DETAILS

Date of Birth:	14th May 2001
Languages Known:	English, Telugu, Kannada, Hindi, Spanish
Residential Address:	C-501, Salarpuria Serenity, 5th Main, Sector 7, HSR Layout, Bengaluru 560102, India

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