Akshath Tiwari

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Summary

Akshath is skilled in Python and Data Wrangling and has knowledge of API design and development. He has experience with cloud services and database management. He has worked on multiple Generative AI and possesses an understanding of CI/CD and Agile development practices. Additionally, Akshath has knowledge in Machine Learning, Generative AI, Mathematics (Statistics & Linear Algebra) and fundamentals of OS and Networking. He looks forward to further developing his skills in software development, architecture design, and to assisting businesses and people through his work.

Education

Manipal University Jaipur   **Jaipur**
B.Tech. Major: Mechanical, Minor: AI ML | Percentage: **83%**   *July 2019 – July 2023*
Relevant Coursework: Data Science, ML, Statistics & Mathematics, Generative AI application development, DevOps Fundamentals Prompt Engineering, LLMs (Large Language Models)
Core competencies: Data Science, Generative AI, Machine Learning, and Backend Development (RESTful APIs)

Skills

Programming Languages: Python, JavaScript, C/C++, SQL
Developer Tools: Azure DevOps, VS Code, Ubuntu, Docker, Git, Postman, Dbeaver, Vagrant, Shell
Database: Postgres, SQLite
Cloud: AWS, GCP
Technology: Fast API, SQL Alchemy, LangChain, Generative AI, Conversational AI, Prompt Engineering
Project Management: CI/CD, Jira, Agile, MS Office
Soft skills: Leadership, Effective communication, collaborator, crisis management, problem solving.
Others: Understanding of HTML, CSS, UX and Figma Design

Work Experience

Deloitte India   **Hyderabad**
Developer (Backend)   *Aug 2023 – Present*
- Enhanced CRUD operation speed of webserver by **~330%** (**4.29x faster**) by using indexing and schema optimization techniques.
- Developed ML model to forecast number of unplanned leaves by workforce to further predict supply-demand gaps.
- Improved Generative AI application response time from LLM by **~160 %** using chain of thoughts and structured output.
- Managed and maintained backend services of **10+** clients deployed Kubernetes cluster.
- Created automated testing script which helped team save **200+ hours** of manual work using selenium, botto and fabric.
- Developed scripts which generated insights (confusion matrix, result calculation) for tracking chat bot's performance enabling a **15%** improvement in response accuracy over two months

Tata-Boeing Aerospace   **Hyderabad**
Data Analyst   *Jan 2023 – June 2023*
- Reduced machine downtime by **14%** (time taken to fetch tool and load after breakage) using a ML model which forecasts the demand of tools based on tool life data.
- Designed and developed dashboards on Power BI helping management to track KPI and metrics, eliminating efforts required to create and send daily reports.

Projects/POCs

Text-SQL-Visualizer
- Developed a Text to Visualization application which generates SQL queries and visualizations based on user input, customizable with any kind of database, vector store & LLM. Achieved **accuracy** up to **~90%**

Document-RAG
- Worked on a RAG application which allows users to query documents (docs, ppt, csv, pdf) by asking simple questions in English. Integrated OCR capabilities for effective extraction and explanation of images in uploaded documents.