Komal Chamyal

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Profile

Innovative Data Scientist with a Passion for Sustainability.

With six years of experience in programming and data (since high school), I've honed my skills in problem-solving, machine learning, data analysis, and modeling, alongside developing a strong business acumen at Aays Analytics. I excel in blending technical expertise with business insights to drive impactful projects. Known for my leadership, communication, and problem-solving abilities, I am dedicated to automating challenges with code. My logical approach and quick learning ability fuel my passion for leveraging my skills in transformative projects and achieving organizational success.

Experience

Associate Data Scientist, Aays Analytics – Gurugram, India   Nov 2023 – Aug 2024

- Exposure to Gen AI/LLMs and various deployment techniques used in the industry to solve customer problems using Chatbots (Knowledge Retrieval using LLMs), Time Series Analysis, Intelligent Variance Analysis- Anomaly Detection using External Benchmarks
- Aays Hackathon 2023 – Implemented a Zero Shot Learning Classification model (Hugging Face) to classify customer service user queries. Segmented the queries which gave insights into customer behaviour.
- OpenAI – Fine tuned GPT-3.5 to summarize pytesseract OCR text into required business KPIs from Non-scannable PDFs. Worked with OpenAI API to generate training data for a custom LLM model.
- RAG System - Implemented a part of Retrieval system within a React + Vite web application (ReactFlow) using a mind map approach. The system was designed to seamlessly integrate with an LLM, facilitating the generation of more contextually appropriate responses. Link to POC - `https://my-mind-map.netlify.app/`

Associate Data Analyst, Aays Analytics – Gurugram, India   July 2023 – Nov 2023

- Immense Client Appreciation for handling a very complex project.
- Utilizing Power BI dashboards, Excel, Azure, Databricks and Probelem solving to provide valuable insights into the business challenges encountered by clients.
- Power BI reporting – worked on PBI reporting of innovation projects and finance projects of a client. Developed complex DAX measures to solve business problems. Created various complex Power BI capabilities like dynamic user input based visualizations, 3x3 Simulation Grid and more.
- Worked with clients to bring wireframes to life, understand their requirements and pain points, and finally suggest and execute the solutions decided upon.
- Testing - Performed testing in Excel using Vlookups/Pivots and developed various SITs for data assets.

Education

IIT Madras, Diploma in Programming   2020 – 2023

- CGPA: 8.02/10 (Transcript)
- Coursework: System Commands (BASH), Modern Application Development (Python Flask+Vue.js), Database Management Systems, OOP-Java, DSA - Python

University of Delhi, B.Sc in Computer Science (Hons)   2020 – 2023

- CGPA: 8.851/10 (Transcript)
- Minor: Mathematics
- Coursework: Data Structures and Algorithms, Software Engineering, Digital Image Processing, Information Security, ML, AI, Operating Systems, Computer Networks.

Open Source

Project Hello World Aug 2024 - Present

- Objective: Research eco-friendly alternatives using open-source technologies, rather than LLMs, to build a robust ChatBot for the plant domain.
- Role: As the team lead for our diverse group —including data scientists (myself included) and AI enthusiasts—I oversee all aspects of team operations, project management, and mentorship. I ensure that each team member pursues their passions, aligns their work with our collective goals, and fosters a collaborative and spirited team environment.

Independent Projects

Big Mart Sales Analysis & Prediction 🔗 GitHub

- Performed Data Cleaning, EDA, Pre-Processing, Modelling and Hyperparameter Tuning. Models used/experimented with: Linear, Polynomial, Ridge, Lasso, SGD Regression; Decision tree, Random Forest, XGBoost, LightGBM
- Technologies Used: Python - Sklearn, SHAP, NumPy, Pandas, Matplotlib, Seaborn

Urban Shopper - Grocery App 🔗 GitHub

- Grocery app like Blinkit/Swiggy. Logging in as admin and managers (RBAC). The user can log in and add items from different categories to their carts and checkout. Backend daily reminders and a monthly analysis report also sent to the user.
- Technologies Used: Flask, Vue.js, Redis, Celery, SMTPLib

Additional Experience

Python Lead Student Mentor, IIT Madras – Remote Aug 2021 – Sept 2021

- Managed and led a team of two sub-mentors and a group of 16 students. Organized 2-hr Python coding sessions everyday and helped the students with their doubts. Gave hints and demonstrated concepts as per need - Focusing on Code-First Approach.
- Students who had failed their programming exam took these sessions and everyone was able to pass easily after attending them. One student was able to solve the entire 2 hr paper correctly in just 20 mins.

Coordinator at Enactus Hansraj, Hansraj, University of Delhi - India Jan 2021 – June 2021

- Worked on real-time social entrepreneurship projects driven by students.
- Armaan: Innovated by creating dishwashing scrubbers from used coconut husks, promoting sustainability. We planned to teach the addicts to make this easy product and support themselves as entrepreneurs.
- Nirmalya: Conducted the initial research and development to create potpourri from flower waste collected from temples. The R&D was successful, and the project was successfully launched.

Technologies

Programming Languages: Python, C++, Java, SQL, JavaScript, R, DAX, M-code, Shell Scripting
AI/ML: OpenAI/Azure Open AI, NLP, Generative AI (LLMs), OpenSource (HuggingFace), PyTorch, TensorFlow, Transformers, LangChain, Streamlit, REST APIs, Prompt Engineering
Tools/Software: Power BI, Azure, DataBricks, MS Excel, GIT (CI/CD), Swagger Editor, Postman/Insomnia
Development: Vue.js, Flask, REST APIs, Linux/Bash/Shell, HTML/CSS, jQuery, AJAX, SQL-Alchemy
DBMS: SSMS, MySQL, PostgreSQL

Additional Skills

Problem Solving, Analytical Thinking, Leadership, Client Relations, Communication, Team Collaboration, Quick Learning, Curiosity, Self-Starter, Passionate and Driven

Certifications

Microsoft Certified: Power BI Data Analyst Associate (PL-300) Sept 2023 - Sept 2024