

B AKHIL KUMAR

Hyderabad, IN | +918977665957 | akhilkumarb1997@gmail.com | [Linkedin](#) | [Github](#) | [Portfolio](#)

SUMMARY

Results-driven Data Scientist with 4 years of expertise in developing cutting-edge AI solutions. Demonstrated success in architecting end-to-end AI applications, including Gen AI agents, RAG-powered chatbots, and intelligent video analytics systems. Combines deep technical knowledge in Machine Learning, Computer Vision, and MLOps with strong leadership abilities to drive AI initiatives from conception to deployment. Proven track record of collaborating with stakeholders to translate complex AI solutions into measurable business value.

EDUCATION

Mahaveer Institute of Science & Technology

Bachelor of Technology

Major in Electronics and Communication Engineering

Hyderabad, IN

September 2014 - October 2018

Siddhartha Junior College

Math, Physics, Chemistry

Hyderabad, IN

July 2012 - July 2014

EXPERIENCE

Pranathi Software Services

Data Scientist

Hyderabad, IN

September 2023 – Present

- Implemented a **Multilingual Chatbot** web application using Python, Flask, NLP and JavaScript, enabling users to interact with the bot through both text and speech inputs.
- Designed and actualized “**Intelligent Video Analytics for Efficiency Tracking**” that can be used for Work efficiency tracking, Shopping Mall Management, Manufacturing and Warehousing etc. using Computer Vision technology.
- Engineered a cutting-edge **Document Parsing solution** utilizing advanced OCR technology to accurately extract and process government ID information (PAN and Aadhar), resulting in a 40% reduction in manual data entry errors and saving 100+ hours monthly.
- Spearheaded the creation and implementation of Gen AI models for Video Summarization, ASR, and NER, resulting in a 25% improvement in accuracy rates and a 30% reduction in processing time.
- Built customer support bots using **Retrieval-Augmented Generation(RAG)** frameworks, efficiently utilizing vector stores and Gen AI to provide accurate responses in less than 1 second 95% of the time.
- Designed an **Email Automation system** that utilizes Mail API's and Gen AI to efficiently understand the context of incoming mails and respond to them appropriately without human intervention, handling over 1,000 customer emails per day.
- Worked on generating **AI Flyers** that uses wav2lip architecture to accurately lip sync the given avatar video into any given audio.
- Developed **Avatar Video Chatbots** that can handle queries on a website.
- Developed a **Sitemap Generator** tool for internal use of Web Development team to generate a professional sitemap based out of a description of a website using Gen AI.
- Worked on building **AI Action Agents, Conversational Voice Agents** used for multiple purposes to streamline and simplify the workflow and increase efficiency of services.

- Worked on building **Text-to-Video** and **Audio-to-Video** models for generating videos with lip sync matching the audio.

Randstad

Client: Institute for Development and Research in Banking Technology(IDRBT)

Hyderabad, IN

Data Scientist & Research Associate

September 2021 – August 2023

- Crafted **8 KNIME** workflows using **LIME**, **SHAP**, and Counterfactual methods to explain black box models for Analytical Customer Relationship Management in **Banking** and **Finance**
- Conducted research on **Variational Autoencoder** using neural networks and NLP which led to development of **Chaotic Variational Autoencoder** based **One Class Classifier** for Insurance **Fraud Detection**.
- **Acquired, Cleaned, and Preprocessed over 15 datasets** using **machine learning** methods to gain insights.
- Deployed 3 **End to End Machine Learning** applications using **Docker**, **Kubernetes** and **MLflow**
- Facilitated the "Advance AI/ML for Banks" program for a group of 6 individuals from diverse banking institutions.

GlobalLogic

Associate Analyst

Hyderabad, IN

April 2021 – September 2021

- Worked on **Google Waymo project** to tag images and videos for self-driving cars using 4 variations of cloud compute tools.
- **Presented 20+ findings and insights** to senior management to establish best practices and guide analysis into action and results.

DevOps Enabler&Co

DevOps Engineer Intern

Bengaluru, IN

January 2020 – June 2020

- **Designed and built 2 prototypes for CI/CD** for a website using **GCP**, **Git**, **Docker**, **Kubernetes**, **Jenkins** and documented project design for reference and future use cases.

SKILLS

Data Science Frameworks and Libraries: Scikit-learn, NumPy, SciPy, Plotly, Pandas, Matplotlib, Tensorflow, Keras, Pytorch, OpenCV, Huggingface, H2O, MLflow, DVC, Evidently AI

Programming languages and Big Data: Python, R, Hadoop, Apache Spark, Yarn Cluster Setup

Web Development: HTML/CSS, Flask, FastAPI, Django, Gradio

Cloud and Databases: GCP, Linux, MySQL, AWS, Azure

Machine Learning/Deep Learning Techniques: Linear Regression, Logistic Regression, Support Vector Machine, Ensemble Trees, RandomForest, A/B Testing, Data Mining, Predictive Modeling/Analytics, Statistical Analysis, Anomaly/Outlier Detection, Customer Segmentation Analysis, Artificial Neural Networks(ANN), Convolution Neural Networks(CNN), Recurrent Neural Networks(RNN), Long Short term Memory(LSTM), Variational Autoencoder(VAE), Generative Adversarial Networks(GAN), Gen AI, Computer vision, NLP

NLP Techniques: BoW, Word2Vec, Doc2Vec, TF-IDF, BERT, NLTK, Spacy, Sentimental Analysis

Gen AI Stack: OpenAI, Llama, Claude, Gemini, Mixtral, Langchain, ChromaDB, FAISS, Huggingface, RAG, AI Agents, Tool calling

CI/CD: GIT, Jenkins, Docker, Kubernetes, Github, Gitlab, Bitbucket

Tools and IDE: KNIME Visual Analytics, Jupyter Notebook, Google Colab, Visual Studio Code

CERTIFICATIONS

- Diploma in Data Science by HSAI

ACCOMPLISHMENTS

- Got awarded 3 times as "**Alpha Player**" in **Globallogic** in the period of 6 months for being a top and accurate contributor for the project.
- A publication in **ISDA 2023** for "**Explainable Artificial Intelligence for Analytical Customer Relationship Management in Banking and Finance**"