Monika Kusumanchi

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Education:

Year	Degree	Institute Name	CGPA
2024	B.Tech	Gayatri Vidya Parishad College of Engineering for Women, Andhra Pradesh	8.0
2020	Class XII	Tirumala Junior College	9.6
2018	Class X	Sri Chaitanya Techno School	10.0

Skills:

- **Languages**: Python, SQL, C
- **ML & DL Frameworks**: PyTorch, TensorFlow
- **Technologies**: NLP, LLM Fine-Tuning (Llama, GPT, Falcon), Vector Databases (Pinecone, ChromaDB)
- **Tools**: Apache Airflow, Docker, FastAPI, Google Cloud Platform, Power BI

Work Experience:

- **CloudKarya.inc (internship): Dec 1st,2022 - Present**
  - **Model Development & Fine-Tuning:** Led fine-tuning of large language models (LLMs) such as Llama and GPT to enhance text-based information extraction and classification for internal applications.
  - **Vector Database Integration:** Implemented vector databases like Pinecone and ChromaDB for optimized semantic search, accelerating data retrieval for NLP projects by over 30%.
  - **Cloud-Based Deployment:** Deployed machine learning models on GCP using Docker and FastAPI, ensuring scalable, version-controlled production environments.
  - **Pipeline Management:** Developed automated pipelines in Apache Airflow for model training and versioning, streamlining updates and monitoring for consistent performance.
- **HomeGround (Internship): June 1st,2022 - August 1st,2022**
  - **Computer Vision Application:** Created real-time object tracking models using OpenCV for video analysis, achieving a 25% increase in accuracy in identifying sports interactions**.**
  - Algorithm Optimization: Fine-tuned and tested deep learning algorithms, focusing on performance improvement for rapid, real-time video applications.
- **Various Projects:**

•Automated Resume Parsing and Scoring Pipeline:

- Developed an end-to-end pipeline using **Apache Airflow** to automate resume parsing from **Google Cloud Storage**, leveraging **GPT-4** to extract key information and score resumes based on job descriptions. and loaded final results into **BigQuery** for further analysis. Automated the process using **scheduled DAGs**, triggered by new resume uploads.

•Lung Abnormality Detection :(Link)

- Built a **serverless microservice application** to diagnose lung diseases (Covid-19, Tuberculosis, Pneumonia, Cancer) using X-ray images. Leveraged **FastAPI**,**Google Cloud**, **BigQuery**, and **Docker** to develop the solution, combining machine learning and deep learning techniques.

Certifications:

- Neo4j Certified Professional
- Microsoft Certified Data Analyst
- Microsoft Certified Power BI Data Analyst

Achievements:

- Smart India Hackathon Winner with 1 lakh Prize money and had an interaction with Prime Minister Narendra Modi Garu.
- AI Accenture Hackathon Runner Up with 1 lakh Prize Money.
- UNESCO India Africa Hackathon Finalist.
- Best Customized Corpus Prize in Deep Learning contest.

Extra Curricular Activities:

- Microsoft Learn Student Ambassador (BETA).
- Wrote a Blog on Medium(Link), Business Combat Winner.
- Got silver medal in running, throw ball competition school level.
- Google Developers Student Club core member, Women Tech Makers member.