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ksandeepkumar34567@gmail.com
Portfolio
GitHub Profile
LinkedIn Profile

EDUCATION

National Institute of Technology, Warangal

Bachelor of Technology in Mechanical Engineering CGPA: 7.50

•IIT Madras 2026

Bachelor of Science(BS) Online degree in Data Science and Programming

•FIITJEE 2022
Intermediate Education Percentage: 97.1%

EXPERIENCE

•Mouri Tech

May 2025-July 2025

Internship

- Built a 3-stage ML pipeline (Image QA, Invoice OCR, Price Prediction) to automate second-hand product verification and pricing.
- Designed a cloud-first data architecture with Azure Blob (images/invoices) for unstructured data and Azure SQL
 DB for structured metadata and results.
- Applied MobileNetV2 + OpenCV for image QA age detection (92% accuracy, 88% recall) and Azure Cognitive Services OCR for invoice verification (95% precision).
- Built a **LightGBM** pricing model (MAPE 6%) using product metadata to ensure reliable price recommendations.

Personal Projects

•Laptop Price Prediction

Machine Learning Project

- Tech Stack: Python | Pandas | Scikit-learn | Matplotlib | Seaborn
- Conducted **data preprocessing** and visualization to prepare and understand the dataset.
- Analyzed laptop pricing trends considering variables like Storage, RAM, Brand, and Weight.
- Developed regression models using Decision Trees, Random Forest, and XGBoost to estimate laptop prices.
- Achieved the best model accuracy of 88% with Random Forest, evaluated using RMSE and R² metrics.

• Fashion Recomendation System

LINK

2026

CGPA: 7.43

Deep Learning Project

- Tech Stack: Tensorflow | Numpy | OpenCv | Scikit Learn
- Built recomendation system using **ResNet50** + **GlobalMaxPooling2D** for feature extraction on 40K fashion dataset.
- Preprocessed images and generated 2048-dimensional embeddings for efficient representation.
- Implemented k-Nearest Neighbors (k-NN) with Euclidean distance to retrieve top-5 similar items.

•AI Financial News Analyzer

LINK

 $Lang Chain\ Project$

- Tech Stack: LangChain | FAISS | Unstructured | OpenAI API
- Built an AI-powered system to analyze multiple newspaper articles and answer finance-related questions..
- Implemented LangChain with RecursiveTextSplitter to create context-preserving document chunks...
- Used **FAISS vector database** with semantic embeddings (SentenceTransformers) for efficient retrieval.
- Integrated RetrievalQA with mapreduce to aggregate knowledge across multiple news sources.

TECHNICAL SKILLS AND INTERESTS

Languages/Tools: Python, Structured Query Language (SQL), Excel

FrameWorks: Pandas, Matplotlib, Scikit-Learn, Tensorflow, FAISS (Facebook AI Similarity Search), LangChain

Databases/ORMs: SQLite, MySQL, PostgreSQL, SQLAlchemy

Cloud Platforms: Azure [Blob, SQL, Cognitive Services, ADF]

Data Science Concepts: Statistics, Probability, Clustering, Time Series Forecasting

Positions of Responsibility

•Management Member, Team Spardhak

Feb 2024- Mar 2025

- Helped manage social media handles by preparing posters, letters, reports and presentations using **productivity tools** (Excel, Canva, PowerPoint) for organization of content, and smoother coordination within the team.