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EDUCATIONAL BACKGROUND

UPES
2022-2026
Bachelors of Technology (Computer Science And Engineering)   CGPA - 7.50

TECHNICAL SKILLS

Languages : Java , Python , HTML/CSS , JavaScript
Frameworks and Tools : SpringBoot, PowerBI, AIML, MsExcel, SQL, Django, FastAPI

INTERNSHIP

WESS(Women Employment , Safety and Security) NGO | *Summer Intern*   Gurgaon , Haryana
- Led the internship group at an NGO, providing guidance and mentorship to peers, fostering collaboration and secured 15% more participation in the drives.
- Spearheaded four community initiatives addressing women's safety and employment; coordinated knowledge-sharing workshops that led to actionable strategies, directly impacting over 300 women in the local area.

PROJECTS

ML MODEL RECOMMENDER | *Python, Scikit-learn, XGBoost, Pandas, Meta-Features*
LINK
- Built an intelligent system that **automatically analyzes any dataset** and recommends the most suitable **machine learning model** for **regression, classification, or clustering** based on **meta-features** like **skewness**, **correlation**, and **multicollinearity**.
- Used a heuristic decision engine to **select optimal models (e.g., Random Forest, Ridge, KMeans)** without needing to train all models, improving efficiency by **70%**.
- Achieved up to **95% R²** on regression datasets and **97% accuracy** on classification datasets during evaluation.
- Tested on both **user-uploaded CSVs** and **built-in sklearn datasets**, enabling fast prototyping and streamlined model selection for ML workflows.

VISUAL ECHO - REAL-TIME CAPTION GENERATION | *Python, OpenCV, CLIP, BLIP, EasyOCR, Pyttsx3, Google Speech API*
LINK
- Built a **real-time, voice-controlled vision assistant** that processes live video at **~20 FPS** and generates **contextual audio captions** using **CLIP, BLIP, and EasyOCR**.
- Engineered a **multithreaded Python system** enabling **parallel speech recognition, visual analysis, and TTS**, reducing **response latency to under 2 seconds**.
- Integrated **Google Speech Recognition** and **offline TTS (pyttsx3)** for **hands-free operation** designed for **visually impaired users**.
- Leveraged **3+ pre-trained models** from **OpenAI and Salesforce Hugging Face** to enable **modular, plug-and-play vision-language pipelines**.
- Designed and tested across **multiple object categories** and **varied environments**, delivering **robust and consistent real-time performance**.

MEDICAL IMAGE-TEXT CORPUS BUILDER & FILTERING PIPELINE (NeuroScrape) | *Python, Selenium, Pandas, Regex, NLP, OpenCV*
LINK
- **Scraped 1,200+ brain scan images** and metadata from OpenI using **Selenium**, automating collection into a structured dataset.
- **Cleaned and filtered** data into an **NLP-ready corpus** of **843 samples**, using **Pandas** and **Regex-based rules** to remove collage-type entries.
- Designed **drill-down visuals**, enhancing trend analysis and **boosting decision-making efficiency by 20%**.Perform statistical analysis to identify scan type frequencies and optimize the dataset for future ML use cases like image classification and scan-type recognition.

HOSPITAL PATIENT ANALYSIS | *PowerBI Dashboard*
LINK
- Built an **interactive dashboard** for patient trends, serving **50+ healthcare professionals** and **cutting reporting time by 60%**.
- Optimized **data cleaning** with **Power Query**, **improving processing speed by 50%** and **reducing errors by 30%**.

- Designed **drill-down visuals**, enhancing trend analysis and **boosting decision-making efficiency by 20%**.

ACHIEVEMENTS

- [HackerRank](): Java 5 Stars, Problem-Solving 5 Stars, SQL 4 Stars
- [LeetCode](): 250+ Problems solved.

CERTIFICATES

- Google Data Analytics by Google on Coursera
- Machine Learning Specialization by Andrew Ng and [deeplearning.ai]() on Coursera