

KF SURYA

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PROFILE

Enthusiastic B.Tech student specializing in AI and generative AI with proficiency in Python and Java. Skilled in machine learning, natural language processing, and computer vision. Seeking opportunities to leverage AI technologies to solve complex problems and drive innovation.

TECHNICAL SKILLS

- **Programming Language:** C, Java, JavaScript, Python
- **Data Analysis:** Exploratory Data Analysis with Python, R programming
- **Data Visualization:** Matplotlib, Seaborn, Plotly
- **Libraries:** Pandas, NumPy, Scikit-learn
- **Machine Learning:** Supervised and Unsupervised Learning, Model Evaluation
- **Deep Learning:** Neural Networks, Convolutional Neural Networks (CNN)
- **Computer Vision:** OpenCV, Image Processing, Object Detection
- **Development Tools:** TensorFlow, PyTorch, Streamlit, Chainlit, LangChain

PROJECTS

High-Performance CPU RAG System with Quantized Llama2

Feb 2024

- **Engineered a cutting-edge Retrieval-Augmented Generation (RAG) system** using quantized Llama2 models, optimized for CPU-only deployment. Leveraged advanced technologies including **LangChain**, **Chainlit**, **Sentence-Transformers**, **FAISS**, and **PyPDF2** to enhance language understanding and generation, achieving high performance and cost efficiency without the need for GPU infrastructure.
- Implemented advanced retrieval techniques combining FAISS and Sentence-Transformers for precise information retrieval, and shared the project on GitHub to support open-source collaboration and innovation.

MEDISAGE | Medical Assistant

Feb 2024

- **Developed Medical Info App:** Built a Streamlit app using GPT-3.5-turbo to deliver detailed medication and condition information in multiple languages (English, Hindi, Nepali, Tamil).
- **Secure Integration and Design:** Implemented LangChain and Open AI API with secure key management. Designed a responsive UI with custom HTML and markdown.
- **Technical Expertise:** Utilized Python, Streamlit, and AI tools. Managed full project lifecycle, including API handling, UI/UX design, and multilingual support.

Churn prediction in Telecom Sector

Nov 2023

- Developed a sleek app using Python, Scikit-learn, and Streamlit to forecast telecom customer churn.
 - Data Magic: Transformed raw data into insights with Pandas wizardry.
 - Tech Mastery: Leveraged Python prowess to create a seamless user experience.

Automated Surveillance and Messaging System | Automatos

Oct 2023

- Detects human pose in real-time video feed or video file
- Sends Telegram notification with current time and image upon human detection
- Works with both webcam and video files and sends alerts every 5 seconds after a person is detected.

EXPERIENCE

ML Intern

Yanne Technologies, Coimbatore, Tamil Nadu, India

Dec 2023- Jan 2024

- Developed a LangChain-based Medical Assistant app utilizing OpenAI GPT-3.5 model, facilitating accurate medical information retrieval.
- Designed and implemented a Checkbox Detection app using OpenCV to detect checked boxes from OMR sheets for **Vizhi EyeCare** NGO, streamlining data processing tasks.
- Demonstrated proficiency in machine learning, natural language processing, computer vision, and application development.
- Collaborated with cross-functional teams to deliver high-quality solutions, contributing to impactful projects in the healthcare and NGO sectors.

AWARDS, CERTIFICATIONS, AND ACHIEVEMENTS

- Best Paper Award (AMSAS-2022)
 - **Certified by DRDO and Department of Chemistry-KPRIET**
- Machine Learning with Python: Certified by IBM with Honors
- Exploratory Data Analysis: Certified by Coursera
- Python for Data Analysis: Pandas & NumPy: Coursera Certified
- Foundations: Data, Data, Everywhere: Google Certified
- Git and GitHub: Certified by 365 Data Science

EDUCATION

- B.Tech. AI and Data Science| KPR Institute of Engineering and Technology(2nd year) 2022-present
- Intermediate| National Infotech College-Nepal 2018-2020