Nikith Pinni

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Skills

- **Programming Languages**: C++, Python
- **Web Development**: HTML, CSS, JavaScript (Basics), SQL
- **AI and Data Science**: Generative AI (Experienced in Training and Deploying Fine Tuned LLM Models), RAG Pipelines, EDA/ETL, Building and Training customized ML and DL models, Tensorflow
- **Developer Tools**: Git, GitHub, Visual Studio Code, IntelliJ IDEA
- **Soft Skills**: Analytical Thinking, Problem Solving, Team Collaboration, Leadership Quality

Work Experience / Internships

Roche Pharma India Pvt Ltd (Data Science Intern) **Jan 2024 – Jul 2024**

- Cancer Care Pre-Consultation Bot: Developed a Generative AI project enabling patients to interact with a **pre-consultation bot**, providing in-depth medical information, enhancing patient experience and implemented caching mechanism.
- Email Generator Project: Developed a Generative AI and NLP solution for email generation using meeting call notes. Fine-tuned large language models (LLMs) to extract key subjects from call notes, automating email creation. This solution **saved medical representatives approximately 3 hours per day, significantly reducing manual effort and increasing efficiency**.
- Medical Data Explorer Portal: Developed an automated data collection system integrating information from multiple sources, **reducing reliance on external data vendors, resulting in cost savings of Rs. 2.4 Crore**.
- Employee Performance Review Portal:Designed and developed an optimized interface for retrieving employee performance data, significantly improving efficiency over the existing system. This enhancement **eliminated approximately 10 minutes of navigation time and increased productivity** by automating previously manual tasks.
- Cancer Care Africa: Worked on expansion projects, **extending company's overseas reach, increasing profit margins and new opportunities**.
- **Skills Used:** HTML | CSS | JavaScript (Basics)| REACT | Flask API's | SQL | Beautiful Soup | Scrapy | PyTesseract OCR | LLM Fine tuning and deployment (Generative AI) | NLP techniques (Topic modeling, LSTM) | RAG pipeline retrieval

Projects

PDF Chatbot **May 2024**

- **Tech Stack Used**: Pyhton, LLM Model, Gemini API, Streamlit
- Powered by Google Gemini's LLM for advanced linguistic understanding, enabling dynamic and intelligent conversations.
- Incorporated the functionality to upload and query PDF documents, allowing for seamless interaction and information retrieval
- User-friendly interface and intuitive conversational flow for enhanced user experience.

Text Lens - Text Detector **Feb 2024**

- **Tech Stack Used**: Image Processing Techniques, ML Algorithms
- Developed a novel text extraction system utilizing AGF and MSER algorithms.
- Implemented AGF for contrast enhancement and noise reduction, ML techniques for text region classification.
- Enhanced accuracy and robustness of the text extraction system.

Gem Predict Pro **Feb 2023**

- **Tech Stack Used**: Supervised ML Techniques, Flask, VS Code, AWS Services
- Predicting diamond prices using machine learning, Accuracy up to 90%
- Implemented exception handling for error management,Deployed on AWS cloud infrastructure.Utilized services like Elastic Beanstalk and Code Pipeline

Guest Ease **Oct 2023**

- **Tech Stack Used**: Java Swing , JDBC , MySQL Workbench , IntelliJ IDEA IDE
- User-friendly interface developed with Java Swing for receptionists,Features for managing guest check-ins, check-outs, and reservations
- Integration with the MySQL database using JDBC for storing and retrieving guest information.
- Implemented robust error handling mechanisms for improved stability and user experience.

Research Papers

Enhanced Medical Waste Classification Using ML and ANN integrated with GLCM **May 2024**

- Developed a research project focusing on integrating DL techniques with ML for accurate classification of biomedical and pharmaceutical waste.
- **Increased accuracy from 96% of 98%** by extracting GLCM and MobileNet V3 features as a training dataset and passing them through ML and ANN models.
- **Skills Used**: Deep Learning, Machine Learning, Artificial Neural Networks, Model Evaluation

Traditional Rice Variety Classification Enhanced Using GLRLM **June 2024**

- Introduced a novel approach by integrating GLRLM (Gray Level Run Length Matrix) textural features with other essential features within a neural network. This research underscored the significant role of textural features in effectively classifying complex data points.
- Following the integration of this novel approach, the **model's accuracy demonstrated notable improvement, increasing from 96% to 98.6%**
- **Skills Used**: Deep Learning, Machine Learning, Artificial Neural Networks, Model Evaluation

Scholastic Achievements

- Earned Special Research Credits at Sastra Deemed University for publishing a research paper
- First place in Machine Learning Hackathon

Additional Courses

- Completed course on Gen AI
- Pursuing course on Data Science Masters

Interests

- Cricket, Badminton, Writing, Reviewing, Browsing Tech related content