Prasanna Kolli

✉ thirupathiprasanna999@gmail.com   📞 9701749894   📍 Hyderabad

in linkedin.com/in/thirupathiprasanna-kolli   ⭘ github.com/prasanna272

🔗 https://huggingface.co/Prasanna2000

PROFILE

To begin my career in a dynamic organization where I can leverage my knowledge and skills to contribute to business growth while continuously expanding my expertise. My aim to work in a collaborative environment that fosters learning, innovation, and professional development, enabling me to deliver impactful results.

PROJECT EXPERIENCE

Software and Research Developer

- **Design and develop an efficient communication system for electric vehicles (EVs) using CAN, LIN, and Flex Ray protocols.**
- **Responsibilities:** Develop, test, and maintain software solutions while contributing to research projects. Collaborate on designing and implementing innovative solutions.
- **Duration:** October 2024-January 2025
- **Skills:** Strong programming proficiency (Python preferred), MS WORD, Machine Learning, Visual Code.
- Gain hands-on experience in software development, work with emerging technologies**,** and receive mentorship to improve technical and problem-solving skills.

Innomatics Research Labs – Data Science and GenAI Intern

- **Real-World Data Science & AI Projects Across Multiple Domains**
- **Role:** Data Science Trainee
- **Responsibilities:** Led and contributed to end-to-end data science workflows across domains like image classification, NLP, and time series forecasting**,** including data preprocessing, EDA, feature engineering, and model development using supervised and unsupervised learning (e.g., regression, classification, clustering).
- Collaborated in agile, team-based projects**,** effectively communicating insights through dashboards and visualizations, and delivering presentations to stakeholders simulating real-world business challenges.
- **Skills:** Python, NumPy, Pandas, Scikit-learn, TensorFlow/Keras, SQL, Git, Jupyter Notebook, Data Visualization, Problem Solving.

SKILLS

Python
- Python Modules
- Data Types

Machine Learning
• Data Collection & Preprocessing.
• Exploratory Data Analysis (EDA).
• Supervised Learning
• Unsupervised Learning

Deep Learning.
- CNN(Convolutionational Neural Network)
- RNN(Recurrent Neural Networks)
- ANN(Artificial Neural Network

GenAI
- LLMS(Large Language Models)
- OpenAI
- Lang Chain

Hands on Experience in MYSQL
Hands on Experience in Excel

PROJECTS

Design and develop an efficient communication system for electric vehicles (EVs) using CAN, LIN, and Flex Ray protocols.

- **Objective**: Design and develop a low-latency communication system for electric vehicles using CAN, LIN, and and Flex Ray protocols for seamless data exchange among subsystems.

- **Role:** Software and Research Developer Intern
- **Duration:** October 2024 to Jan 2025

Tools & Technologies:
- **Protocols**: CAN, LIN, Flex Ray
- **Skills:** Embedded C, Python, MS Word, VS Code.
- **Responsibilities:**
- **Research**: Analyzed protocols based on bandwidth, latency, and fault tolerance.
- **Design**: Developed a hybrid communication architecture for key EV subsystems.

Sentiment Analysis of Amazon Fine Food Reviews (Machine Learning)
- **Role:** NLP Project Contributor
- **Duration**: April 2024 to July 2024
- **Responsibilities:** Conducted sentiment analysis on Amazon food reviews by preprocessing text data, performing EDA, and transforming it using TF-IDF and Bag-of-Words.
- Built and evaluated ML models (Logistic Regression, Naive Bayes, and SVM), optimized performance, and visualized insights with word clouds and confusion matrices.
- **Skills:** Python, Pandas, NumPy, Matplotlib, Seaborn, NLTK, Scikit-learn, TF-IDF, Bag-of-Words, Logistic Regression, Naive Bayes, SVM, Text Preprocessing, EDA, Model Evaluation.

Neural Network Decision Surface Playground (Deep Learning)
- **Role:** Project Contributor
- **Duration:** July 2024 to October 2024
- **Responsibilities:** Designed and implemented neural networks with varying architectures to classify synthetic data, and visualized decision surfaces to interpret model behavior.
- Experimented with activation functions (ReLU, sigmoid, tanh), tuned hyper parameters, and monitored training using loss curves and accuracy metrics.
- **Skills:** Python, TensorFlow/Keras, Matplotlib, NumPy, Neural Networks, Activation Functions, Model Training & Evaluation, Data Visualization, Deep Learning Concepts.

AI Code Reviewer – GenAI Application
- **Role:** AI/ML Developer
- **Duration:** September 2024 to November 2024
- **Responsibilities:** Developed a Generative AI-based Code Reviewer using LLMs, Lang Chain, and Retrieval-Augmented Generation (RAG) to provide context-aware feedback on code.
- Built a Streamlit app for real-time suggestions, with custom prompt engineering for bug detection, style checks, and performance insights.
- **Skills:** Python, Lang Chain, Streamlit, OpenAI API / LLMs, Prompt Engineering, Retrieval-Augmented Generation (RAG), Git, Software Development Practices.

COURSES

Data Science
Innomatics Research Labs
- **Comprehensive Skill Development**: Mastered core topics such as data analysis, statistical methods, machine learning, and data visualization.
- **Advanced Python Expertise**: Acquired hands-on experience in data wrangling, model building, and deploying data-driven solutions effectively.
- **Real-World Impact**: Leveraged skills in practical projects, showcasing the ability to extract actionable insights from complex datasets and deliver business value.

CERTIFICATES

Exploratory Data Analysis
(*Innomatics Research Labs*)

Advance Data Analysis 🖉
(*Innomatics Research Labs*)

Certificate of Participation in Tata Steel Tomorrow Lab (Student Track) of Tata Steel Tomorrow LAB 2023 🖉
Tata Steel

Advanced Machine Learning and Gen AI 🖉
(*Innomatics Research Labs*)

MCQ challenge of the House Of Code 🖉
Lowe's Companies, Inc

Software and Research Developer 🖉
(*HARTALKAR Innovations Pvt. Ltd*)

EDUCATION

Bachelors of Technology (ECE)   2019-09 – 2023-07
Chebrolu Engineering College Affiliated to JNTU Kakinada   Guntur, India

LANGUAGES

English

Telugu

Hindi

ACHIEVEMENTS

Software and Research Developer Intern (LOR) 🖉   2024-10 – 2025-01
(*HARTALKAR Innovations Pvt. Ltd*)