

# Katanguri Sai Harshith Reddy

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## Education

Kakatiya Institute of Technology and Science, Warangal

Bachelor of Technology in Computer Science and Engineering | CGPA: 7.54/10

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Warangal, India

## Projects

**Demand-Based Dynamic Pricing Solution** | *Machine Learning, RandomForest, Data Science, Python* |

- \* **Developed** real-time data to predict optimal prices based on demand, resulting in improved revenue and customer satisfaction.
- \* **Increased** profit percentage by 74%.
- \* Achieved significant **profit growth** through the implementation of RandomForest Regressor.

**Smart Blog Creation Engine** | *Large Language Models* |

- \* **Implement** a blog generation system featuring 3 key components, utilizing open-source LLM models such as **LLAMA3**, seamlessly integrated with **Langchain** for advanced language processing and **streamlit** for an intuitive, user-friendly interface.
- \* **Designed** to automatically generate both a title and comprehensive blog content based on the provided topic, enhancing content creation efficiency

**Trend Sense : AI-Based Fashion Style Recommendation** | *Machine Learning, Python* |

- \* **Developed** a deep learning-based fashion recommendation system to recommend similar clothing items based on images, using the **Inception V3** model for feature extraction and ImageNet weights .
- \* **Enhanced** user experience with personalized recommendations based on cosine similarity between clothing images
- \* Used data **augmentation** techniques to expand the variety of the training dataset, helping the model better understand different clothing styles and recommend a more diverse range of items to users

**Lingua Bridge: English - Hindi AI Translator** | *Finetuning, Python, LLM's*—

- \* **Engineered and fine-tuned a transformer-based architecture** for high-quality English to Hindi translation, achieving **97% translation accuracy** on the evaluation set
- \* Leveraged **transfer learning** from pre-trained models like mBERT to **optimize** the model for the Hindi language, minimizing training time while maintaining high performance.

### 2.0.1 Don't Be The Last – Real-time Multiplayer Web Game

— React, Node.js, Socket.io • Built a fast-paced multiplayer browser game with real-time Web Socket communication. • Players join rooms, answer timed questions, and get eliminated based on a bomb-pass mechanic. • Implemented server-authoritative design to ensure synced timers, elimination logic, and anti-cheat validation. • Features include live scoreboard, random question generator, room support, and deployment-ready architecture.

## Technical Skills

**Languages:** Python, Java(OOPS), SQL(Intermediate)

**Technologies:** Machine Learning, Data Science, Data Handling ,NLP,React js,Node js.

**Libraries:** Langchain ,Scikit-learn ,Numpy ,Matplotlib ,Pandas ,Seaborn ,Streamlit.

## Extracurricular Activities

- \* Volunteered in events like blood donation camps and Wall of Kindness, impacting over 500+ needy people.
- \* Organized college hackathons with 300+ participants, providing hands-on coding experience and problem-solving skills
- \* **Hobbies:** Cricket, Music, Movies, Community Service, Fitness.