RIYA

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EDUCATION

National Institute of Technology, Tiruchirappalli　　　　　　　　　　**2023 - 2025**
- M.Sc. Computer Science, CGPA: **7.81**

Patna Women's College, India　　　　　　　　　　**2019 - 2022**
- *B.Sc. Statistics, CGPA: 9.89*

Presidency Global School, India
- *CBSE (Class XII), PCM, Percentage: 83.6%*　　　　　　　　　　**2018 - 2019**

- *CBSE (Class X), CGPA*: **10**　　　　　　　　　　**2016 - 2017**

SKILLS

Python | SQL | Machine Learning | Deep Learning | NLP | Artificial Intelligence | Numpy | Pandas | Data Visualization |

Exploratory Data Analysis | Power BI | MS Excel | Generative AI

PROJECTS

Quora Question Pair Similarity　　　　　　　　　　**Oct'24**

- Developed a **text analytics** approach aimed to predict **sentence similarity** by cleaning and preprocessing the textual dataset using **NLP techniques**.
- Extracted and examined both basic and advanced features, including **fuzzy features**, to optimize feature representation.
- Employed **TF-IDF Vectorizer** tuned **Logistic Regression** and **XGBoost** model, achieving **0.91 AUC and 83%** accuracy further improved accuracy to **90%** by using **Word2Vec** embedding and training **RNNs** and **LSTMs** network.

AI Doctor 2.0 – Multimodal Medical Chatbot　　　　　　　　　　**Sep'24**

- Designed an AI-Powered chatbot capable of processing **vision and voice** inputs for **healthcare** queries **using multimodal LLMs.**
- Integrated key technologies, including **Groq API** for inference, **Llama 3 Vision** for image analysis, **OpenAI Whisper** for speech-to-text (STT), and **gTTS /ElevenLabs** for text-to-speech (TTS).
- Developed a **real-time**, interactive voice-based UI using **Gradio,** enabling seamless **doctor-patient interactions** while **optimizing speech processing** with Python, **ffmpeg, and portaudio.**

SecureSight　　　　　　　　　　**Jul'24**

- Designed a robust **network intrusion detection system** entailing implementation of Machine Learning models, includes **Decision Tree**, **Random Forest**, **Logistic Regression**, **Naive Bayes** on NSL- KDD dataset, **accuracy** ranging from **75.5%** to **89%** and **f1 score** from **78%** to **90%**.
- Conducted comprehensive Exploratory Data Analysis (EDA), handled outliers, and performed feature extraction based on **Pearson Correlation Coefficient**. Applied OHE and **normalization**, resulting in a data set with optimized features.
- Optimized Decision Trees (accuracy improved from **84%** to **86%)** through hyperparameter tuning and utilized ensemble learning techniques like Random Forest to enhance **robustness**, mitigate **overfitting**, and improve generalization.

ACADEMICS AND EXTRACURRICULAR ACHIEVEMENTS

- Secured **Rank 1** in Department for the batch 2022, Patna Women's College.
- Secured **Rank 2** under UGC scheme of 'Basic Scientific Research' for undergraduate's students.
- A volunteer under the **Being Helper Foundation**, 60 days of internship, which aims at providing Social Activities towards education and skills development of deprived kids/women of slums areas.

POSITIONS OF RESPONSIBILITY

Nit Trichy | Head, Executive Team Optima　　　　　　　　　　**Mar'24**
- Directed the planning and execution of "Optima," leading a team of **15** to ensure alignment with event objectives and achieved a **25%** increase in attendance through effective stakeholder collaboration and timely delivery.

Patna Women's College | Coordinator, Vigyan Utsav　　　　　　　　　　**Mar'21**
- Managed logistics, marketing, and scheduling for Vigyan Utsav, attracting over **500** participants and boosted participation by **30%** through strategic marketing and ensured smooth execution via effective communication.