Education

Birla Institute of Technology, Mesra

Ranchi, Jharkhand

Bachelor of Technology in Computer Science and Engineering; CGPA: 8.67

2021 - Present

Sarala Birla Public School

Ranchi, Jharkhand

2019 - 2021

12th Board (CBSE); Percentage: 93.33%

Relevant Coursework

Data Structures and Algorithms, Operating System, Object Oriented Programming, Database Management System and Computer Networking

Experience

Reseach Project -BIT Mesra

May 2024 - June 2024

Research Intern

 $Github\ Repo$

- Engineered an advanced deepfake detection model, leveraging MBConv blocks and SAM modules in PyTorch, achieving state-of-the-art feature extraction and attention mechanisms.
- Spearheaded the development of a high-efficiency pipeline integrating optical flow analysis with multiprocessing, enhancing processing speed by 30% and improving identification accuracy by 25% in video datasets.
- Achieved an 80% accuracy rate, setting a new benchmark for deepfake detection robustness.
- Technologies and libraries utilized: PyTorch, OpenCV, skimage, concurrent.futures, torch_xla, Kaggle.

Projects

Food-Express | React.js, MongoDB, Express.js, Node.js

May 2024 - June 2024

Individual Project

Github Repo

- Designed and developed a highly responsive food delivery web app utilizing MongoDB, Express.js, React.js, and Node.js, providing a seamless user experience.
- Implemented an intuitive search bar and category differentiation, reducing search time by 25% and enhancing user navigation.
- Leveraged MongoDB for robust data storage, ensuring the integrity and accessibility of user information, food details, and order histories, increasing data retrieval speed by 30%.
- Built comprehensive admin and user sections, incorporating user authentication, logout, and detailed order tracking features for enhanced user engagement and administrative control.

Anuvad-Translate | HTML, CSS, JavaScript

July 2023 - Sept 2023

Individual Project

 $Github\ Repo$

- Developed a language translation app using JavaScript, HTML, and CSS, providing users with seamless translation capabilities.
- Integrated MyMemory API for real-time translations, ensuring accurate and quick language conversions, reducing translation time by 20%.
- Implemented user-friendly features, including text swapping, language selection, and clipboard operations, enhancing overall app usability.
- Enhanced user experience with speech synthesis, adding text-to-speech functionality for better accessibility and interaction.

Technical Skills

Languages: C++,Python, Java, C, HTML/CSS, JavaScript **Framework**: React.js, Express.js, Node.js, Tailwind CSS

Databases: MySQL, MongoDB

Developer Tools: Visual Studio Code, Git, Github, Kaggle, Google Colab

Soft Skills: Creative Thinking, Problem Solving, Teamwork, Communication, Empathy

Languages Known

• English (Full Working Proficiency) • Hindi (Full Working Proficiency)

Other Interests

• Cricket • Volleyball