

MEGHANA KURUVA

meghana.k23@iiits.in | LinkedIn | GitHub

CAREER OBJECTIVE

An enthusiastic Computer Science and Engineering student seeking a software development internship where I can apply my knowledge of full-stack web development and AI/ML concepts, gain hands-on industry experience, and contribute to building efficient and scalable applications.

EDUCATION

| | |
|---|--|
| Indian Institute of Information Technology, Sri City | 2023 – Present |
| <i>B.Tech in Computer Science and Engineering</i> | <i>CGPA: 8.5</i> |
| Ratna Junior College (with Aakash Institute) | 2021 – 2023 |
| <i>Intermediate Education</i> | <i>Board of Intermediate Education</i> |
| Good Will High School | 2021 |
| <i>Secondary Education</i> | <i>State Board</i> |

TECHNICAL SKILLS

Programming Languages: C, C++, Python, JavaScript, Java, SQL

Frameworks: Node Js , Express Js , React Js , Tailwind , Bootstrap , REST API

Cloud Databases: MySQL, PostgreSQL , MongoDB

ML / DL: Scikit-learn, PyTorch, Neural Networks, Classification, Regression, Clustering , numpy , pandas

Tools: Git, Ollama , Mistral , Postman

Platforms Github , Vercel , Render

Relevant CourseWork: Data Structures and Algorithms , Database Management Systems , Operating Systems , Computer Networks , Object-Oriented Programming

PROJECTS

Railway Sleeper Crack Detection (Honours Project)

[Link]

Technology Stack: Deep Learning, Computer Vision, CNNs, Python

- Developed a YOLOv8-OBBA model to detect structural defects with **92%+ mAP**, utilizing Oriented Bounding Boxes to reduce localization error by 15% and labeled a dataset of 169+ high-resolution images from Roboflow , implementing data augmentation (rotation, shearing) to increase model robustness against varying lighting conditions.

Heart Disease Prediction

[Link]

Technology Stack: PyTorch, Neural Networks, Classification

- Achieved an **86%** F1-score on the UCI Heart Disease dataset; optimized the architecture with Dropout ($p=0.5$) and Adam optimizer, reducing generalization error by 12%
- Validated model stability through K-fold cross-validation, ensuring a variance of less than 3

Chat Application

• Live Project

- Architected a real-time communication pipeline using WebSockets (Socket.io), reducing message delivery latency to under 150ms while supporting concurrent data streams for multiple active rooms
- Designed theme-based UI personalization features, enabling users to customize visual elements across five distinct themes and enhancing accessibility for users who required higher contrast ratios.

Swipe

• Live Project

- Engineered a fluid swipe-to-match interface using Framer Motion. Implemented authentication ,live chat using Socket.io and RESTful APIs for seamless communication .
- Implemented a stack-based state management system to handle a local pool of 20+ profile cards, reducing unnecessary DOM re-renders by 25

POSITIONS OF RESPONSIBILITY

| | |
|---|--------------------|
| Core Member at Epoch Club (AI/ML) | 2024 – 2025 |
| <ul style="list-style-type: none">Designed the official website for CyberTea 2.0, a major event organized at IIIT Sri City.Managed a 2-day AI/ML Hackathon for 25 groups (83 total participants), overseeing project evaluations and event logistics within a strict 3-hour daily window. | |
| Member at BeatTrippers Dance Club | 2023 – 2024 |

- Represented the university in competitive events at Utkrishta and Abhisarga cultural fests