

## SUMMARY

Computer Science Engineer with expertise in Data Structures & Algorithms, Machine Learning, NLP, Blockchain, Web & Android Development. Passionate about solving real-world problems with technology.

## TECHNICAL SKILLS

- Programming Languages: C, C++, Python, PHP (Basic)
- Web Technologies: HTML, CSS, JavaScript, Django
- Android Development: React Native, Java (Basic)
- Databases: Firebase (Android), MySQL (Web)
- Machine Learning & AI: ML Algorithms, Deep Learning, NLP
- Operating Systems: Windows, Linux (Ubuntu)
- Tools and platform: Git, Colab notebook, Docker, Hugging Face, Kaggle, langchain, RAG
- Other Skills: Data Structures & Algorithms, Blockchain (Solidity)

## EDUCATION

**M.Tech**, Computer Science & Engineering | IIIT Trichy (2023 – 2025) | CGPA: 8.5/10

**B.Tech**, Computer Science & Engineering | NERIST (2019 – 2023) | CGPA: 8.52/10

XII (Class 12 Equivalent) | NERIST (2017 – 2019) | CGPA: 8.61/10

X | Don Bosco School (2017) | CGPA: 10/10

## WORK EXPERIENCE

### Teaching Assistant | IIIT Trichy (2023 – 2024) (DBMS, DSA, Programming Paradigms)

- Assisted students with Database management and helped them learn the basics.
- Assisted in teaching Data Structures and Algorithms to B.Tech Computer Science students.
- Supported instruction and facilitated tutorials for the Programming Paradigms course for B.Tech Computer Science students.
- Facilitated tutorials, provided academic support, and graded assignments to aid student understanding and performance.

### Researcher | Tripura University (July – August 2022)

- Examined decentralized ledger technologies for anti-theft applications in vehicle networks, pinpointing three key areas for improvement in data encryption, thereby reducing potential theft.
- Proposed and presented innovative security enhancements for urban vehicle networks.

### Android Developer Associate | The Entrepreneurship Network (March – April 2022)

- Developed and optimized Android applications as part of an internship program.
- Gained hands-on experience in mobile app development, debugging, and UI/UX improvements.
- Technology used: kotlin, Java

## PROJECTS:

2025

Android  
development, Web  
development,  
Machine Learning

### Krishi Sahayta [Link](#)

- Created an Web app chatbot and an android app to assist farmers with farm management, market prices, and buyer connections.
- Built my own models for intent recognition(hugging face), made different multi models for better predictions, used pre-trained LLMs for advanced predictions .
- Advanced to finals of Code Titans Hackathon (Microsoft Azure 2022).
- Implementing Machine Learning with NLP for 99% accurate predictions.
- Technologies Used: HTML, CSS, JS, Flask, Python, Machine Learning,Deep Learning, NLP, React Native

2023

Machine  
Learning, Deep  
Learning

### Classification of Air Quality Data [Link](#)

- Optimized machine learning models to classify and predict air quality.
- Achieved 99.6% accuracy using Deep Learning regression and 99.68% with ML classification.
- Technologies Used: Machine Learning, Deep Learning

2023

Blockchain and CRN

### Securing Cognitive Radio Network using Blockchain [Link](#)

- Developed a Blockchain model in Solidity to secure cognitive radio networks from SSDF attacks.
- Simple logic applied to secure the stream of data
- Technologies Used: Blockchain, Solidity, Ganache

2021

Android  
Development  
project

### MLIMP [Link](#)

- Developed an interactive Android app integrating five ML models for educational purposes.
- Designed to enable hands-on learning and experimentation with ML concepts.
- Technologies Used: Kotlin, Java, Machine Learning

## PUBLICATIONS

- Sayan Das, Dr. M. Ambika, “From Data to Harvest: Leveraging Machine Learning and Dataset Visualization for Crop Prediction”, MIND 2024 Conference (Springer CCIS, December 20-21, 2024).
- Sayan Das, Dr. M. Ambika, “Revolutionizing Indian Farming: Machine Learning-Powered NLP for Optimal Crop Recommendations”, ICLMDE Conference, Dehradun (Elsevier, November 28-29, 2024).