

DEBOJYOTI ROY

Final Year Btech — Computer Science and Engineering — IIITR

+91 9123880355 cs22b1023@iiitr.ac.in linkedin.com/in/debojyoti github.com/debojyoti

Education

Indian Institute of Management, Vishakapatnam	Percentage: N/A	Jan 2025 - Feb 2027
Masters in Business Administration		
Indian Institute of Information Technology Raichur, India	Current CGPA: 8.71/10.0	Nov 2022 - May 2026
B.Tech in Computer Science and Engineering		
Higher Secondary Education, Don Bosco School Bandel	Percentage: 95.00%	Jul 2021
Senior Secondary Education, Don Bosco School Bandel	Percentage: 93.2%	Jul 2019

Projects

Dermoscopic Skin Disease Detection using Machine learning, Deep Learning , NLP& LLM	Apr - Jul 2025
ConvNeXt • ViT • EfficientNetV2 • GPT-2 • PyTorch • HuggingFace Transformers	
- Designed a novel FusionNeXt-XtremeNet model fusing ConvNeXt, ViT, and EfficientNetV2 for 4-class dermoscopic acquisition-type classification.	
- Achieved 93.53% accuracy and 94.07% F1-score using stratified 10-fold cross-validation on the ISIC dataset.	
- Integrated GPT-2 to generate structured clinical diagnostic reports from predictions, enhancing explainability and clinical relevance.	
Music Classification using Speech Recognition	Jan 2025 - May 2025
AI • ML • WAV2VEC2 • UI/UX • MFCC • Mel-spectrogram	
- Developed a deep learning model to classify speech signals related to music into four categories (normal, breathy, tense, creaky) using MFCC and Mel spectrogram features, achieving high accuracy through contrastive learning and advanced neural networks.	
Crop Yield Prediction and Crop Rotation Planner	July - Nov 2024
Deep Learning (CNN, RNN) • Python • Google Earth Engine • GIS and Shapefiles Processing • Random Forest	
- Developed a geospatial model using satellite data and climatic factors to predict crop yield across different regions, optimizing agricultural planning.	
- Designed an intelligent crop rotation system leveraging GIS and historical yield data to recommend optimal crop sequences for maximizing soil fertility and yield.	
Decentralized Web Application in MediTech Domain	Jan - Aug 2024
Blockchain • MongoDB • Flutter • React • UI/UX	
- Engineered a blockchain-based web app platform with a user-friendly UI.	
- Designed interactive features like patient section, doctor section, pathology section, and admin section.	

Experience

Summer Research Intern on Dermoscopic Skin Disease Detection	Apr 2025 – Jul 2025
Under the supervision of Dr. Jitendra V. Tembhurne, IIIT Nagpur	
- Developed the FusionNeXt-XtremeNet model integrating ConvNeXt, ViT, and EfficientNetV2 for dermoscopic classification.	
- Achieved high accuracy and interpretability by combining deep learning with GPT-2 for clinical report generation.	
- Documented it for a reputed journal for publication consideration.	
Head of Training and Placement Cell, IIITR	Jan 2025 - Present
- Leading and coordinating a team of four students to manage internship and placement activities.	
- Conducting industry outreach, collaborating with recruiters, and organizing training sessions for students.	
GDSC App Development, Head	2023 - 2024
- Led and organized multiple app development and tech sessions under Google Developer Student Club.	
- Fostered student engagement and awareness of Google technologies through workshops and projects.	

Achievements

- Cleared IIT JEE Mains & Advanced**, PGPMCI, and GATE with strong scores.
- Attended the prestigious CNI Summer School 2025 at IISc Bangalore (ECE Division).
 - Solved 100+ DSA problems on LeetCode, CodeForces, and HackerRank.
 - Secured top ranks in hackathons & coding competitions.
 - Led multiple technical events & workshops at IIITR.
- Organized & mentored students in coding contests & workshops.

Relevant

Coursework

Computer Vision,Computer Networks, DSA, DBMS, OS, Image processing,AI/ML, Deep Learning,NLP,Probability & Statistics