

DIYA CHANDA

(+91) 9734499410 | diya.chanda03@gmail.com

portfolio-diya-chanda.vercel.app | github.com/chandadiya2004 | linkedin.com/in/diya-chanda2004

Education

The Neotia University

B.Tech in Computer Science and Engineering (AIML)

2023 – 2027

CGPA: 9.48

Rajkumari Santanamoyee Girls' High School

XII (WBCHSE)

2023

Grade: 82.4%

Experience

AI/ML Research Intern

National Institute of Technology (NIT) Durgapur

Jun 2026 – Jul 2026

- Investigated 7 EfficientNet-B0 variants in TensorFlow by replacing standard linear convolutions with quadratic formulations and evaluating RBF, Polynomial, Swish, Leaky ReLU, and ELU activations.
- Systematically benchmarked variants against the 78.72% baseline, analyzing vanishing gradients, numerical instability, and activation behavior to identify the most stable quadratic configuration.

AI/GenAI Intern

GenByte AI, Kerala, India

Jun 2026 – Aug 2026

Remote

- Developed a college admission web application using LangChain, Streamlit, and FastAPI to enable users to interact with and retrieve information from admission-related documents.
- Built document-processing workflows using PyMuPDF for standard PDF extraction and OCR-based techniques for scanned documents, integrating extracted content into the application's retrieval pipeline.

Web Development Intern

Xeta Labs, Guwahati, India

Jun 2025 – Sep 2025

- Developed and integrated a full LMS system into a production client website across Student, Tutor, and Admin roles.
- Debugged and resolved 50+ backend issues pre-launch, covering authentication, REST APIs, and database reliability.

Projects

CampusSphere — Co-Curricular Governance Platform

Live Demo | GitHub

- Tech Stack:** Next.js, Tailwind CSS, Express.js, PostgreSQL, JWT, bcrypt, Pino.
- Contributed to a three-portal Admin, Faculty, and Student platform with 25+ REST APIs supporting activity submissions, approval workflows, credit banking, grievance handling, and institutional reporting.
- Implemented authentication, role-based authorization, API workflows, and backend functionality for secure management of student activities and co-curricular records.

FruitQ-GradeX — AI-Powered Fruit Quality Assessment

Live Demo | GitHub

- Tech Stack:** TensorFlow, Keras, OpenCV, Streamlit, Grad-CAM, NumPy, Pandas.
- Developed a multi-head CNN to jointly classify 4 fruit types and quality conditions using 9,146 images, achieving 96.8% and 98.5% test accuracy respectively.
- Integrated Grad-CAM for explainable predictions and deployed a Streamlit application supporting real-time image and webcam-based fruit quality assessment.

Research Publications

- S. Dutta, S. G. Neogi, **D. Chanda**, A. Pramanik, Ö. Girgin and E. L. Öncül, "FruitQ-GradeX: Determining Fruit Quality and Grading with Explainable Deep Learning," *IEEE ICRITO 2025*, pp. 1–7. DOI: 10.1109/ICRITO66076.2025.11241706.
- S. Dutta, S. G. Neogi, S. Chowdhury, V. Chole, A. Pramanik and **D. Chanda**, "Cropsense: Explainable Deep Learning Framework for Accurate Quality Detection in Solanaceous Crops," *IEEE ICRITO 2025*, pp. 1–8. DOI: 10.1109/ICRITO66076.2025.11241535.

Skills

Programming Languages: Python, Java, SQL, C

AI/ML & Deep Learning: PyTorch, TensorFlow, Keras, scikit-learn, OpenCV

Generative AI & NLP: LangChain, RAG, LLMs, Vector Search

Web & Backend: FastAPI, Node.js, Express.js, React.js, REST APIs

Databases & Cloud: PostgreSQL, MongoDB, Supabase, AWS, Redis

Tools & Deployment: Docker, Git, GitHub, GitHub Actions