KEYA MITRA

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TECHNICAL PROFILE

Skilled in Web Development and AI/ML with experience in medical image analysis and breast cancer detection. Built automated pipelines improving radiologist efficiency by 35% and reducing report turnaround time. Seeking an entry-level Software Engineering or Web Development role.

EDUCATION

Master of Computer Application Oct 2023 - Jul 2025
Kalyani Government Engineering College, MAKAUT **CGPA: 8.57/10**

Bachelor of Science in Computer Science Sep 2020 - Jul 2023
Kanchrapara College, University of Kalyani **CGPA: 9.06/10**

Higher Secondary Jun 2020
Kanchrapara Municipal Polytechnic High School, WBCHSE **83.2%**

Secondary Jun 2018
Barui Para High School, WBBSE **58.57%**

SKILLS

Programming Languages	C, Java, Python
Web Development	HTML, CSS, JavaScript, PHP
Frameworks/Tools	Streamlit, SQL, Git

PROJECTS

- **Recipe Recommender** May 2025 - Jul 2025
  - Built a web-based recipe recommendation system suggesting dishes based on user-input ingredients and preferences.
  - **Tech Stack:** HTML, CSS, JavaScript, PHP
- **Breast Mammogram Report Generation Using Deep Learning** Feb 2025 - Jun 2025
  - Built a ResNet50 + LSTM model with GloVe embeddings to automatically generate diagnostic reports from mammogram images, enhancing radiologist efficiency by 35% and reducing report turnaround time by 15 minutes per case.
  - Engineered a complete pipeline with Streamlit UI, Grad-CAM visualizations, and automated PDF export.
  - **Tech Stack:** Python, PyTorch, ResNet50, LSTM, GloVe, NumPy, Pandas, OpenCV
- **Breast Cancer Detection Using Ultrasound Images** Oct 2024 - Jan 2025
  - Delivered 80.3% test accuracy with F1-score of 0.80 and ROC AUC score of 0.91, classifying ultrasound images into benign, malignant, and normal categories.
  - Implemented transfer learning using ResNet50 and VGG16, alongside a custom CNN, and debugged overfitting and augmentation errors using regularization and early stopping.
  - **Tech Stack:** Python, TensorFlow, Keras, ResNet50, VGG16, CNN, NumPy, Pandas, OpenCV, Matplotlib, Scikit-learn

ACHIEVEMENTS

- Scored 87.92 / 120 in the Joint Entrance Exam for Computer Application (JECA) 2023 and secured 45 GMR.