

Biswadeep Mukhopadhyay

Bardhaman, West Bengal, 713104 | (+91) 9474894533 | biswadeep.mukhopadhyay00@gmail.com |
linkedin.com/in/biswadeep-mukhopadhyay | github.com/Biswadeep01

RESEARCH INTERESTS

Applied Machine Learning, Deep Learning, Explainable AI (XAI), and Computer Vision. Seeking industrial research opportunities to implement transparent and interpretable AI solutions.

EDUCATION

University Institute of Technology | Bardhaman

Master of Engineering (M.E.) in Computer Science | **Expected July, 2027**

- **Focus:** Advanced ML, Neural Networks
- **Key Coursework:** Pattern Recognition, Computer Vision

University of Burdwan | Bardhaman

Master of Science (M.Sc.) in Computer Science | **August, 2025**

- **Result:** CGPA: 8.78 (~ 82.8%)
- **Key Coursework:** Intelligent Computation, Cryptography

St. Xavier's College, Burdwan | Bardhaman

Bachelor of Science (B.Sc.) in Computer Science | **July, 2023**

- **Result:** CGPA: 9.56 (~ 90%)
 - **Key Coursework:** Image Processing, Soft Computing
-

TECHNICAL SKILLS

- **Languages:** Python (Expert), C, SQL.
- **AI/ML Frameworks:** TensorFlow, PyTorch, Keras, Scikit-learn.
- **Data Science:** NumPy, Pandas, Matplotlib, OpenCV.
- **Tools & Platforms:** Git, Google Colab, Kaggle, Linux.

RESEARCH EXPERIENCE

Research Lead | Explainable Deep Neural Architectures for Leukemia Classification: Advancing Accuracy and Interpretability in Automated Blood Disease Diagnosis *October, 2024 - August, 2025*

- Developed a Transfer Learning based CNN Model for Leukemia Detection, achieving a 93% accuracy.
- Integrated **Explainable AI (XAI)** techniques (e.g., GradCam) to interpret model decisions, reducing "black-box" opacity for consultants.
- Presented findings in "Internal Academic Review".

Research Assistant | Post Pandemic Era Touchless 2-layer Biometric Authentication System using ID Card Detection and Face Recognition *January, 2023 - August, 2023*

- Developed a Transfer Learning based CNN Model for Automatic Card Detection, scoring a 90% accuracy.
- Presented findings in "Internal Academic Review".
- Optimized data preprocessing pipelines using Image Segmentation using MATLAB.

ACADEMIC PROJECTS

- Implemented a k-NN classification system with hyper-parameter optimization
- Performance comparison between Resnet50, VGG16, GoogleNet CNN Model for Facial Recognition with local dataset.