

MITHILA YEASMIN MITU

+880 1687 969491 | myeasmin.cs@gmail.com | iammithila.com

ORCID: <https://orcid.org/0009-0004-7008-5465> | **Google Scholar:** Br5diH0AAAAJ | **GitHub:** mithilayeasmin-tech

RESEARCH PROFILE

AI Engineer and Medical AI Researcher specializing in deep learning, computer vision, and medical image analysis. B.Sc. in Computer Science and Engineering with a CGPA of 3.74/4.00 and research experience at the IUBAT AI Research Lab. Author of two 2026 journal publications on deep learning-based renal abnormality and skin disease classification. Research interests include AI-assisted diagnosis, medical imaging, healthcare AI, and clinical decision-support systems.

RESEARCH INTERESTS

Artificial Intelligence • Deep Learning • Computer Vision • Medical Image Analysis • Healthcare AI • Explainable AI • Clinical Decision Support

EDUCATION

B.Sc. in Computer Science and Engineering — International University of Business Agriculture and Technology (IUBAT), Bangladesh | 2013–2016

CGPA: 3.74/4.00

IELTS Academic: Overall Band 7.0

PUBLICATIONS

1. **M. Y. Mitu and M. A. Hossain**, “Deep Learning-Based Detection of Renal Abnormalities from CT Images: A Study on a Bangladeshi Cohort,” American Journal of Smart Technology and Solutions (AJSTS), 5(2), 2026.

DOI: 10.54536/ajsts.v5i2.8226

- Developed a transfer-learning framework for multiclass CT classification of Normal, Cyst, Stone, and Tumor.
- Compared Xception, VGG16, and ResNet152V2; Xception achieved 99.84% accuracy and 0.06 validation loss.

2. **M. Y. Mitu and M. A. Siddiki**, “Automated Skin Disease Classification Using Deep Neural Networks: A Study on a Bangladeshi Dataset,” American Journal of Innovation in Science and Engineering (AJISE), 5(2), 2026.

DOI: 10.54536/ajise.v5i2.8227

- Developed a deep learning framework for dermatologist-annotated skin disease image classification.
- Compared DenseNet201, InceptionV3, MobileNet, NASNetLarge, VGG19, and Xception; NASNetLarge achieved 91.0% accuracy, 90.5% precision, 90.8% recall, and 90.6% F1-score.

RESEARCH EXPERIENCE

AI Research Engineer – Mass Data Ltd. | Mar 2025 – Present

- Develop AI solutions using deep learning and computer vision for image-based applications.
- Conduct applied AI research and document technical findings for research and development.
- Contribute to integration and automation of AI-driven systems.

Amprex Tech Solution – AI/Research Project Trainee | Nov 2023 – Present | Project-Based

- Received hands-on training and project-based experience in Artificial Intelligence, Machine Learning, Deep Learning, and Computer Vision, including data preprocessing, model development, training, and evaluation.
- Applied AI/ML techniques to practical projects using Python and deep learning frameworks, strengthening skills in experimentation, performance analysis, and end-to-end AI research workflows.

Research Assistant – IUBAT AI Research Lab | Apr 2023 – Present

- Developed and evaluated deep learning models for medical image classification, applying preprocessing, augmentation, transfer learning, and model training techniques.
- Conducted comparative performance analysis using Accuracy, Precision, Recall, F1-score, and validation metrics; contributed to research manuscripts and technical documentation.

TECHNICAL SKILLS

Programming: Python

AI/ML: Machine Learning, Deep Learning, Transfer Learning, CNNs

Frameworks: TensorFlow, Keras, PyTorch, Scikit-learn

Computer Vision: Medical Image Analysis, Image Classification, Image Preprocessing, Data Augmentation, Feature Extraction

Architectures: Xception, NASNetLarge, ResNet152V2, VGG16, VGG19, DenseNet201, InceptionV3, MobileNet

Data & Evaluation: NumPy, Pandas, Matplotlib, Accuracy, Precision, Recall, F1-score, Experimental Design

PROFESSIONAL EXPERIENCE

Senior Manager – Technology & Digital Operations | Jan 2020 – Feb 2025

- Led a multidisciplinary team of 10+ software developers, designers, and content developers.
- Oversaw end-to-end CRM and website development, implementation, and system optimization.
- Directed UI/UX integration and content optimization across digital products and platforms.
- Managed e-commerce store development and customization across Amazon, Shopee, Lazada, Ozon, and Daraz.

UI/UX Developer – MetaConnect Ltd. | Jan 2017–Dec 2019

- Designed responsive web interfaces and translated UI/UX prototypes into front-end implementations.

AWARDS & CERTIFICATIONS

- Academic Excellence Award, IUBAT – Received three times (2013 – 2016)
- Certificate of Merit, British Council – 2013
- NASSCOM IT-ITES Certification, George Washington University – 2016