# Munshi Touibur Rahman

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 in Touib Mahmud
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# Objective

A highly driven Computer Science graduate with expertise in artificial intelligence, machine learning, data science, and cybersecurity. Passionate about applying advanced technologies to solve real-world challenges in healthcare, industrial optimization, and society at large. Committed to continuous learning and innovation, with a strong focus on research, automation, and AI-driven solutions that create meaningful impact.

### Education

# Bangladesh University of Business & Technology

Jan 2021 - Dec 2024

BSC in Computer Science

o CGPA: 3.42/4.0

o Coursework: :Data Structures & Algorithms, Database Management, Linear Algebra, Calculus, Artificial Intelligence, Internet of Things, Machine Learning, Neural Networks, Project Management, Pattern Recognition, knowledge Engineering & Statistics

# Government Science College

Jul 2017 - June 2019

*H.S.C in Science*○ GPA: 4.83/5.0

# Experience

Research Assistant

Jun 2024 - Feb 2024

Bangladesh University Of Business & Technology

o Advance Research in Machine Learning and Deep Learning RA Credential id:BUBT-CSE-900-25

Trainner

July 2024 - Dec 2024

AI Community BUBT

Machine Learning and Deep Learning Trainer Credential id:BUBT-CSE-854-02-2025

# **Publications**

# A Hybrid Architecture with Separable Convolutions and Attention for Lung and Colon Cancer Detection(In Review)

Mar 2025

Md. Darun Nayeem, Md. Emdadul Hasan Shishir, *Munshi Touibur Rahman*, Zeeshan Chowdhury Juwel, Sagor Sutradhar, Md. Saifur Rahman, A B M Shawkat Ali

### **Projects**

# Automated Tuberculosis Detection and Segmentation Using Lightweight CNN and U-Net Architectures

- Developed a custom lightweight CNN model achieving 99% accuracy for binary classification of tuberculosis from chest X-rays, outperforming pre-trained models like MobileNetV2, ResNet50, and VGG16.
- Implemented a U-Net-based segmentation model with 96% accuracy for precise localization of tuberculosisaffected areas, enhancing diagnostic capabilities.

# Data Augmentation Using DC GAN

- Developed a data augmentation pipeline using Deep Convolutional Generative Adversarial Networks (DC-GAN) to enhance dataset diversity.
- Improved model generalization by generating high-quality synthetic data, reducing overfitting in deep learning applications.

### NeXt Word Prediction Using RNN

qithub.com/name/repo \(\mathbf{L}\)

o Implemented a Recurrent Neural Network (RNN) based model for next-word prediction, leveraging sequen-

tial text data.

 Utilized TensorFlow, Keras, and NLTK with LSTM-based architectures to enhance natural language processing and improve predictive accuracy.

# **Technologies**

**Languages:** Python, JavaScript, C, C++, SQL

Machine Learning: TensorFlow, Scikit-learn, Data Preprocessing, Pytorch, Feature Engineering, Statistical

Analysis

Tools: GoogleColab,kaggle,Wireshark, Metasploit,Microsoft Office Suite (Word,Excel, PowerPoint)

### ExtraCurriculum Activities

# AI Community BUBT

Sep 2024 - Present

### Co-Founder & Community Manager

- Established the AI community, developed proposals, and structured operational guidelines.
- Recruited and mentored executive members to ensure smooth community operations.
- Lead the event management department, overseeing planning and execution.
- Successfully organized key initiatives, including:
  - AI Battle 2024 competition.
  - Two seminars on AI advancements and research.
  - A career tour and an industry visit to bridge academia and industry.

Shushaoner Jonno Nagorik, Rajbari **Communication Secretary** Chetona Parishod, GSC **Communication Secretary** 

Sep 2020 - Sep 2021

Jan 2018 - Apr 2029

#### Certifications

o Trainer Of Machine Learning and Deep Learning Credential id:BUBT-CSE-854-02-2025