



N. I. MD. ASHAFUDDULA

Research Interests

Artificial Intelligence, Machine Learning, Deep Learning
Federated Learning, Knowledge Distillation, Decentralized Machine Learning
Computer Vision, Medical Image Analysis
Health Informatics, Bioinformatics

English Language Proficiency

BSc. and MSc. academic Medium of Instruction (MOI) is English
2023 IELTS: 6.5, (L: 7.5, R: 6.0, W: 6.5, S: 5.5)

Education

- 2020–Jan 2023 **MSc. Engineering in Computer Science & Engineering**, *Dhaka University of Engineering & Technology*, Gazipur, Dhaka, CGPA: 3.75 (Honors) / 4.00.
Course: Advanced Image Processing, Advanced Algorithm Design and Analysis, Medical Image Processing, Machine Learning, Cloud Computing, and Neural Network.
Thesis: SKIN CANCER DETECTION UTILIZING INTENSITY VALUE ESTIMATION MODEL WITH A DEEP NEURAL NETWORK
- 2013–2018 **BSc. Engineering in Computer Science & Engineering**, *Rajshahi University of Engineering & Technology (RUET)*, Rajshahi, CGPA: 3.23 / 4.00.
Thesis: COLD-START RECOMMENDATION SYSTEM USING K-NEAREST NEIGHBORS AND DECISION TREE IN MOVIE RATING PREDICTIONS
- 2010–2012 **HSC, Bogra Cantonment Public School & College**, *Bogra, Rajshahi*, GPA: 5.00 / 5.00.
Group: Science
- 2009–2010 **SSC, Bogra Cantonment Public School & College**, *Bogra, Rajshahi*, GPA: 5.00 / 5.00.
Group: Science

Publications

Journal Articles

- 2022 N. I. Md. Ashafuddula and Rafiqul Islam. Melanoma skin cancer and nevus mole classification using intensity value estimation with convolutional neural network. AGH University of Science and Technology, 2022. forthcoming.

In Conference Proceedings

- 2018 Bayezid Islam, N. I. Md. Ashafuddula, and Firoz Mahmud. A machine learning approach to detect self-care problems of children with physical and motor disability. In *2018 21st International Conference of Computer and Information Technology (ICCIT)*, pages 1–4, 2018.

Research Experiences

Dhaka University of Engineering & Technology (DUET), Gazipur

Oct 2022 – **N. I. Md. Ashafuddula, and Rafiqul Islam**, IVE-MDNet: An Improved Transfer Learning Model for Melanoma Diagnosis, In *Submission*.

Advisor : **Dr. Rafiqul Islam**, Professor, Department of Computer Science and Engineering, DUET, Gazipur ([Personal Web-page](#))

Mar 2022 – **N. I. Md. Ashafuddula, Bayezid Islam and Rafiqul Islam**, An Intelligent Diagnostic System to analyze early-stage Chronic Kidney Disease for Clinical Application, In *Submission*.

June 2021 – **N. I. Md. Ashafuddula and Rafiqul Islam**, Developing a contour-based deep learning architecture based on Convolutional Neural Network to efficiently detect brain tumors for an unseen dataset, In *Submission*.

Advisor : **Dr. Rafiqul Islam**, Professor, Department of Computer Science and Engineering, DUET, Gazipur ([Personal Web-page](#))

Rajshahi University of Engineering & Technology (RUET), Rajshahi

July 2016 – **N. I. Md. Ashafuddula, and Biprodip Pal**, Cold-start recommendation system using K-nearest neighbors and decision tree in movie rating predictions.

Advisor : **Biprodip Pal**, Professor, Department of Computer Science and Engineering, RUET, Rajshahi ([Personal Web-page](#))

Projects

2023 **Up-coming, MblApps Mercantile bank service**, Mercantile bank

2022 **mCpay Mercantile bank service**, Mercantile bank

2022 **DNCC tax pay Mercantile bank service**, Mercantile bank

2019–2022 **MedEasy (DaktarBondhu) Android app MedEasy**, online pharmacy service

2019 **Office pick and Drop, Android app** , Avis technologies Ltd.

2022 **Office Inventory management, Android app** , Avis technologies Ltd.

2018 **Light of Hope, Android app** , Avis technologies Ltd.

Recognitions & Awards

2016 **1st Runner-Up, “Nirapod sorok (Android application)” in in IEEE Robodroid Championship (Mobile App contest 2016)**, Rajshahi University of Engineering & Technology

2016 Cricket tournament champion **“Inter department cricket tournament, RUET”**.

2017 Cricket tournament runner-up **“Inter department cricket tournament, RUET”**.

Computer skills

Programming Languages Python, Java, Dart

Frameworks Keras, TensorFlow, Scikit Learn, Java (Spring MVC, Spring Boot), Bootstrap

Web Techs HTML 5, CSS, JSP, Javascript

Database SQL, MySQL, MSsql, Firebase Realtime DB

Tools Google Colab, Anaconda, MS Excel, Android studio ■ IntelliJ

Position of Responsibilities

- Feb 2022 – present **Assistant Officer**, *Software development team, Mercantile bank*, Dhaka, Responsible for Designing client-side and server-side architecture, Building the front-end of applications through appealing visual design, Developing and managing well-functioning databases and applications, Writing effective APIs, Writing technical documentation, and Building high availability components..
- 2019 – 2020 & 2021 – 2022 **Android Consultant**, *Software team, MedEasy*, Banasree, Dhaka, Responsible for analyzing users data to predict the possible treatments using Machine Learning techniques by ensuring reusable, and reliable Java code and also requirement analysis & feature improvement to ensure the best possible application performance..
- Aug 2018 – Sep 2019 **Software Engineer, IT**, *Android team, Avis technologies ltd*, Panthapath, Dhaka, Responsible for designing and developing advanced android applications. Bug fixing and improving application performance, Publishing apps on Google play store ensuring app responsiveness, developing and integrating APIs. .

Trainings

- 2022 **Basic Banking Training**, MBLTI, Mercantile Bank.
- 2018 **Machine Learning course**, *Online course*, Coursera: provided by Andrew Ng, authorized by Stanford university.
- Mar 2017 — Sep 2017 **Top-Up IT training on Java**, *Top-Up IT training on Java organized by BCC under LICT project, training time was 300 hours on Java & Core Java*, organized by Bangladesh Computer Council (BCC), certified by George Washington University, USA.

Referees

PROFESSOR DR. RAFIQUL ISLAM

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Computer Science & Engineering
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