# M Mohaiminul Islam

#### EDUCATION

#### South Asian University, New Delhi, India

Master of Science in Computer Science Noakhali Science and Technology University

Bachelor of Engineering in Computer Science and Telecommunication Engineering

July 2021

Total CGPA:\_3.25/4.0

Dec 2018

Dec 2020

 $Total\ CGPA: 3.14/4$  Last 4 semesters: 3.34/4

## Relevant Coursework

Courses: Intro to Programming, Object-Oriented Programming, Data Structures and Algorithm, Database Management System, Computer Architecture, Computer Network, Compiler Design, Digital Logic Design, Artificial intelligence, Cryptography and Network Security, Operating System, Data Mining, Vector Analysis and Laplace Transform and Fourier Analysis, Numerical Analysis, Differential and Integral Calculus, Discrete Mathematics, Linear Algebra, Probability and Statistics, Software Engineering

Awards: Merit Scholarship (at South Asian University, for the fall, winter, and spring quarters each)

#### Research Interests

- ♦ Developing Regression-Based Multi-Label Learning Models.
- Exploring the realms of Machine Learning and Deep Learning, particularly focusing on Computer Vision applications for in-depth analysis of images and videos.
- Blockchain technology and its applications in decentralized systems.
- Big data analytics, including data processing, storage, and predictive modeling.

# SKILLS

Languages: C/C++, Java, Python, Mysql, Golang

**Tools**: Git/GitHub, Web Scraping, Selenium, Unix Shell, Tableau, Power BI, Pytorch, Keras, Tensorflow, Apache Spark, Aws, Databricks, Docker, Jenkins, Tableau, Microsoft Visual Studio, Google Collab, MySql Workbench, Logisim, Excel, Latex.

# PROJECTS

Ecommerce Data Analysis | Python, Mysql, Pandas, Matplotlib, Apache Spark, Tableau, Data Modeling, ETL, AWS April 2021

• I leveraged advanced data visualization techniques to extract valuable insights from a comprehensive dataset. By visualizing sales patterns, customer behavior, and product trends, I identified key growth opportunities and provided actionable recommendations to optimize business strategies and enhance overall performance.

Brain Tumor Detection | Python, Mysql, Pandas, Matplotlib, CNN, ETL, Keras, Tensorflow, Tableau, Google Collab March 2022

• I I developed an AI-driven system utilizing medical imaging data. Employing advanced image processing and deep learning techniques, I created a model to accurately identify and classify brain tumors from MRI scans. This project aims to assist medical professionals in early diagnosis and treatment planning

Supply Chain Management System | Python, Smart Contract, Mysql, Git, Unix Shell, VS Code

• I designed and implemented a decentralized blockchain solution to optimize and secure supply chain operations. Leveraging smart contracts, immutable ledgers, and real-time tracking, this system enhances transparency, reduces fraud, and ensures the authenticity of products throughout the supply chain, ultimately improving efficiency and trust.

Prison Management System | PHP, HTML/CSS, Node.js, Mysql, Git, Unix Shell, VS Code

May 2018

• A desktop application to manage the details of the Prison, adding and updating prisoners, searching prisoner and their information.

#### Daily Expense Mobile App | Java, Sqlite, Rest API, Git, Android Studio

**April** 2019

• Daily Expense is a Mobile based application in android operating system where we add our daily expenses and end of the month we can see our total cost.

# Masters Thesis

#### On Defining Regions by Data Clustering for Increasing the TPS Rate of State-Based Blockchain

Supervisor: Dr. Amit Banerjee

2020-2021

• Due to sequential mining, the transaction per second (TPS) rate of the state-based public blockchain is not adequate for applications with high network load, such as supply chain management systems or trading. In this research, we consider techniques like the K-Means Clustering algorithm, which uses a region-based concept for distributing transactions to multiple miners for its simultaneous validation to improve the TPS rate of current-day blockchains.

## STANDARDIZED TEST SCORES

★ IELTS

Overall Band Score: 6.5 (L-7, R-6, W-6, S-6.5)

Date Taken: 7-10-2023

#### RESEARCH AND PROFESSIONAL EXPERIENCE

# Lab Instructor, Department of CSTE at NSTU | Mentor

2017

I taught drawing and designing basic Gates, Adder, Encoder, Decoder, ALU, register and finally draw single cycle datapath 32 bit MIPS processor

#### Mobile Application Developer | Internship at BITM

2019

During my internship as a mobile application developer, I gained hands-on experience in designing and developing mobile apps for Android. I collaborated with cross-functional teams, implemented features, optimized code, and contributed to the successful delivery of user-friendly and efficient mobile applications.

#### South Asian University | Research Scholar

July 2019 - April 2021

As a Research Scholar at South Asian University, I collaborated closely with Dr. Amit Banerjee and Dr. Mohd Sameen Chishti Together, we conducted cutting-edge research, explored innovative solutions, and contributed to academic advancements in our field. This experience enriched my research skills and expanded my knowledge in the academic domain.

#### MasterCourse | Data scientist

Sep 2021 – Feb 2022

During my data science internship, I applied various machine learning models, including both supervised and unsupervised approaches, to address complex real-world problems. Additionally, I gained hands-on experience in deep learning, specifically in Convolutional Neural Networks (CNNs), while working on computer vision tasks. I acquired proficiency in tools such as PyTorch and Keras during this practical experience.

#### Ahom Limited | Aws Data Engineer

 $April\ 2022-March\ 2023$ 

I am responsible for architecting and developing data pipelines, ETL and ELT processes, Data Modeling, optimizing data storage and retrieval, and ensuring data quality and availability. I work with diverse data sources, technologies, and tools to support data-driven decision-making and drive organizational growth.

#### Itransition | Data Engineer

June 2023 – Continue

I manage the data pipeline, oversee the ETL process, and handle substantial volumes of data. I organize this data effectively, ensuring that data analysts and data scientists can operate seamlessly and make informed business decisions.