

MD SHAMIM SIDDIKY

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◇ LinkedIn ◇ GitHub ◇ Portfolio

OBJECTIVE

As a keen learner, I anticipate being able to use my analytical and creative grasp of computer science to novel research projects. My unwavering desire to use data-driven insights to discover workable solutions for modern issues has inspired me to opt for the research track and be equipped to apply for a PhD.

EDUCATION

BSc in Computer Science and Engineering

January 2020 - December 2023

American International University-Bangladesh

CGPA - 3.98/4.00

Relevant Coursework: Introduction To Data Science, Data Structure, Algorithms, Web Technologies, Advanced Programming In Web Technology, Computer Networks, Microprocessor & Embedded Systems, Operating Systems

Higher Secondary Certificate

July 2017 - June 2019

Saint Joseph Higher Secondary School

CGPA - 5.0/5.0

PROJECTS

Water Potability Prediction Using KNN

This project utilizes Kaggle's Water Quality dataset to predict potability outcomes. It involves data cleaning, feature normalization, and applies the k-Nearest Neighbors algorithm to build a predictive model. The model's accuracy is evaluated using a confusion matrix, contributing to improved decision-making for water quality. ([Check here](#))

- Language & Tools : R Language, RStudio

Dynamic Dashboard using Power BI

This project uses two data sets of the same premier league season, available in Kaggle, and merged together to create a dynamic dashboard. This dashboard can bring out insights on both player and team performances on various aspects throughout the season. ([Check here](#))

- Tools : Power BI

DMT - Metro Rail Ticketing Web Application

This is a ticketing web application with a React front-end and a Laravel API back-end. The application is designed to simplify the ticket booking process and includes features such as integrated payment gateways supporting all types of payments available in Bangladesh, as well as live location tracking. ([Check here](#))

- Language & Tools : React js, Laravel, MySQL

Hospital Management System

This is a web application made with PHP, jQuery, CSS, and JavaScript which simplifies the complex hospital management processes. ([Check here](#))

- Language & Tools : HTML, PHP, CSS, MySQL, Xampp server

WORK EXPERIENCE

Research Assistant

Sept 2023 - Present

American International University-Bangladesh

Dhaka, Bangladesh

- Leveraged a deep understanding of neural networks and computer vision techniques
- Demonstrated proficiency in data preprocessing, feature extraction, and model training
- Implemented algorithms that provide informative and contextually relevant captions by seamlessly integrating computer vision and natural language processing

RESEARCH EXPERIENCE

Account Cracking Prevention Using Machine Learning

June 2023 - January 2024

This research aims to evaluate machine learning algorithms for detecting unauthorized login attempts by attackers. The algorithm will analyze suspicious IP addresses globally, blocking those engaged in malicious activities like brute-force attacks by clustering them into two different groups (user and attacker). The system will implement unsupervised machine learning for continuous improvement, enhancing internet security, and mitigating the impact of data breaches through controlled verification of each IP address.

Learned Algorithms : Kmeans, DBSCAN, Gaussian Mixture Model, BIRCH algorithm

TEACHING AND TUTORING EXPERIENCE

Personal tutor for standard 9-12 Grade Student

2021 - Present

- Provided one-on-one tutoring sessions to enhance understanding of complex concepts
- Tutored standard sixth to tenth-grade students in Mathematics, Physics, Chemistry, and English
- Educated 11-12th grade students in the practical application of information and communication technology skills

ACHIEVEMENTS

- Dean's List Honors, AIUB
- Tuition fee scholarship
- CTO Forum Innovation Hackathon

SKILLS

Technical Skills	Data cleaning, Data processing, Clustering, Decision making, Problem-solving
Tools	Weka, R Studio, Visual Studio Code, Git, Power BI
Programming Skills	C, C++, Python, R Language, SQL, Assembly

CERTIFICATION

- Google Analytics for Beginners
- Mathematical Thinking in Computer Science
- Programming for Everybody (Getting Started with Python)

EXTRA-CURRICULAR ACTIVITIES

Active football player

- Participated in AIUB football tournament

Joint secretary, Josephite Film & Drama Group - JFDG

2018 - 2019

- Planned and organized events, including screenings, and workshops.
- Articulated effective communication within the group, and managing external correspondence.

Corresponding Secretary, Josephite Wall Magazine Committee

2018 - 2019

- Served as the communicator and mediator for contributors and coordinated content submissions.
- Selected, edited, and scheduled content for the wall magazine

REFERENCES

Dr. Abdus Salam

Assistant Professor, CS
American International University-Bangladesh
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Tohedul Islam

Assistant Professor, CS
American International University-Bangladesh
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