Abdus Samee

Dhaka, Bangladesh

+880-1863360369 | abdussamee16@gmail.com | abdus-samee.github.io | github.com/abdus-samee | linkedin.com/in/abdus-samee-19990128/

Education

Bangladesh University of Engineering and Technology *Dhaka, Bangladesh*

BSc in Computer Science and Engineering *April 2019 - July 2024*

- CGPA: 3.79
- Research Interests: Federated Learning, HCI, Software Engineering

Skills

DSA, Java, Python, C, C++, React, NodeJS, Laravel, HTML, CSS, JavaScript, Typescript, Databases, Tensorflow, MIPS/ARM/Nios, Git, OOP, Sonarqube

Work Experience

Wall Street Docs *Dhaka, Bangladesh*

Junior Software Engineer *July 2024 - till date*

- Working with the Documents team at London to develop structured products and address tech debt.

S2E Lab *Indiana, USA*

Visiting Undergraduate Research Assistant *Oct 2022 - Feb 2023*

- Assisted in dataset collection, parsing, generating and analyzing results from copilot, etc.

HackMerced *California, USA*

Engineering Team Member *Apr 2021 - Jan 2023*

- Contributed to developing and organizing the HackMerced website, implementing new features, updating existing components, and hackathon management.

Research

Zero-shot Prompting for Code Complexity Prediction Using GitHub Copilot

Demonstrated how well GitHub copilot predicts the runtime complexities of programs (NLBSE'23)

NoTeeline: Supporting Real-Time Notetaking from Keypoints with Large Language Models

Developing a novel note-taking tool that enables micro-note taking and expands notes tailored to an individual's writing style (Under review)

Hybrid Synchronization Approach with Dynamic Weight Allocation for Secure Federated Learning

Achieve better trade off between accuracy and training time in federated setup with hybrid synchronization and dynamic weight allocation based on modified gradients (Undergraduate Thesis)

Projects

CodeLytic-Frontend Created a contents' creator-driven educational platform where users can enroll to premium courses, participate in quizzes and track their progress, built on top of React, HTML, JavaScript.

CrickShotClassify Designed two separate models based on a combination of CNN and GRU to run on a custom dataset of 11 different cricket shots and 1 bowled-out action, with a validation accuracy of around 70% in Google Colab

Crunchyroll Developed a streaming site for animes and mangas, enabling viewers to enjoy free and premium content, engage in discussions, and utilized ReactJS, SQL, and NodeJS for the technical implementation.

Wonder Hand Developed a gesture-based system using C++, Arduino Uno/Nano, Bluetooth modules, and hardware circuitry, enabling paralyzed, bedridden, and disabled individuals to control household appliances and trigger emergency alarms through simple palm gestures, promoting accessibility and independence.

Codeforces Flutter App Built a mobile app leveraging Flutter, Dart, and Codeforces API, allowing users with valid Codeforces credentials to track their coding performance through detailed analytics on solved problems, verdicts, and rating progression.

DX Ball Created an iGraphics-based C++ project inspired by the classic DX-Ball game, featuring custom levels, scoresheet functionality, and introducing innovative gameplay elements during the early stages of my undergraduate studies.

Achievements

2019 **Dean's List**, BUET
2021 **Dean's List**, BUET