

Ankur Lahiry

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EDUCATION

Texas State University

PhD in Computer Science

August 2022 – Present

San Marcos, Texas

Bangladesh University of Engineering and Technology

Bachelor of Science in Computer Science and Engineering

May. 2012 – Feb 2017

Dhaka, Bangladesh

RESEARCH INTEREST

- High Performance Computing(HPC)
- Machine Learning
- Human Computer Interaction
- Mobile Computing
- Internet of Things(IoT)

RESEARCH EXPERIENCE

Novel Representation Learning Technique using Graphs for Performance Analytics

Dr. Tanzima Islam

My research investigates how to effectively represent performance data in the High-Performance Computing domain for downstream Machine Learning (ML) analysis. Specifically, we explore a novel data transformation approach for capturing the relationships among features and samples in scientific data. Performance data in HPC is tabular and doesn't consider sample relationships. We explore to create graph structure considering the sample relationships. The challenge in transforming High Performance Computing (HPC) performance data into a graph structure is that, unlike research domains such as social network analysis and disease propagation analysis, where the graphs are pre-specified, graphs for HPC performance data are not provided. We investigate different methods of constructing graphs from performance data and Graph Neural Networks for building effective representations for predictive performance modeling.

Algorithm for Solving Degenerate Problem in Simplex Algorithm

Dr. M. Kaykobad

Though *Simplex Algorithm* has a prominent effect in Linear Programming Problems, it experiences a rare cycle problem, while iteration in Simplex repeats forever. To minimize, *textitBlend's Rule* is the best among three cycle-breaking proposals. In our study, we proposed a better and faster solution that is alternative to the *Blend's Rule*.

PROFESSIONAL EXPERIENCE

DataBird

Software Engineer, DeshiPay

February 2022 – July 2022

Dhaka, Bangladesh

- Coordinated the iOS team of DeshiPay for developing a payment platform for Bangladesh
- Developed the initial project structure and planned projects goal and direction in collaboration with other teams.
- Introduced core payment features for developing DeshiPay, and launched discussion over the app security process.
- Besides leading the team and developing the features, I also interviewed people to enlarge the small team.

DataBird

Software Engineer, Ridmik Labs

June 2020 – January 2022

Dhaka, Bangladesh

- Implementing real-time chatting in RidmikChat iOS application using *XMPPFramework* for messaging and *WebRTC* for VOIP services.
- Involved in developing new features of the RidmikChat iOS application, fixing bugs in the features, and enhancing the User Experience.
- Following the processes that are described to maintain *Agile Methodology* including code review, code merging, feature discussions and decisions etc.

Prefeex Ltd.

Senior Software Engineer

June 2019 – May 2020

Dhaka, Bangladesh

- Led the iOS team to develop an iOS app for a Dhaka-based restaurant reservation solution from scratch.
- Implemented different modules to enrich the user experience alongside fixing bugs and monitoring the app performance
- Improving the performance of the team through implementing *Agile Methods*
- Worked with developing system design to enlarge and scale up Prefeex App.

iPay Systems Ltd.

Software Engineer

April 2017 – May 2019

Dhaka, Bangladesh

- Developed iPay iOS application that helps users to perform different financial actions in real time
- Implemented new features, reviewing codes, fixing errors, updating and upgrading the features
- Ensured the security of the app by adding new features in the iOS app
- Built iPay SDK for ensuring payments through iPay.
- Developed different small frameworks to support the iOS application.

OTHER PROFESSIONAL EXPERIENCE

BellBizzer Inc.

Software Engineer

Seattle, WA, USA

- Implemented and developed iOS application of a rental marketplace based in Seattle.
- Actively participated in designing and developing of the system, as well as leading the different modules and maintaining fixations of the modules.
- Maintained constant communication with the client and discussed the features and scalability of the system
- Helped the designer to develop a robust and interesting app design with my own knowledge.
- Monitored the performance of the app, alongside the system of Bellbizzer

NOTABLE UNIVERSITY PROJECTS

- A built-in app-locker android app for Bangladesh based Mobile Manufacturer - *Walton*
- Developed dummy military management system using JSP
- A desktop based Patient History Recorder for Doctor using Java
- A E-commerce book storage android app to keep records of the books

TECHNICAL SKILL

- Programming Languages: C, C++, Swift, Java, Python, Golang
- Database: SQL, MySQL
- Miscellaneous: iOS & Android Development, Git, Flutter, PyTorch