Jahir Sadik Monon

jahirsadik.github.io ◇ linkedIn ◇ kaggle ◇ github ◇ jahirsadikmonon@gmail.com

RESEARCH INTEREST

I am broadly interested in developing autonomous agents that continuously learn, reason, and generalize. My work is at the intersection of reinforcement learning, multi-modal learning, and embodied AI.

EDUCATION

University of Dhaka   Dhaka, Bangladesh
B.Sc. (Hons) in Computer Science and Engineering   *2019 - 2023*
CGPA: 3.93/4.00 | Ranked 1st in class | Advisor: Dr. Md Mosaddek Khan
Thesis: *Learning to Cooperate Among Heterogeneous Agents in Sparse Reward Environments*

Dhaka College   Dhaka, Bangladesh
Higher Secondary School Certificate | GPA: 5.00/5.00   *2016-2018*

Government Laboratory High School, Dhaka   Dhaka, Bangladesh
Secondary School Certificate | GPA - 5.00/5.00   *2008-2016*

RESEARCH EXPERIENCE

Center for Computational & Data Sciences, IUB | CCDS   *2024 - present*
Research Assistant   Dhaka, Bangladesh

- Research projects on Reinforcement Learning, Multi-modal learning & LLM planners.

- Advisors: Dr. Amin Ahsan Ali and Dr. AKM Mahbubur Rahman

ACADEMIC EXPERIENCE

Coding for All Initiative, IUB | Coding for All Initiative   *2024 - present*
Tutor   Dhaka, Bangladesh

- Tutored undergraduate students in the CIS-101 courses, covering topics about Python programming language, application development, introduction to AI, Prompt Engineering, and others.

PUBLICATIONS

Towards Heterogeneous Agent Cooperation in Decentralized Multi-Agent Systems   *2024*
Jahir Sadik Monon, *Deeparghya Dutta Barua, Md Mosaddek Khan*
Topic: Heterogeneous agent cooperation in decentralized Multi-agent Reinforcement Learning

HONORS & AWARDS

DataVerse Challenge - ITVerse 2023 | Finalists	*2023*
Robi bdapps Ideathon, Dhaka University | 2nd Runner-up	*2023*
Hult Prize Impact Summits | Campus Champion & Regional Finalists	*2021*
Bangladesh Mathematical Olympiad Regional | Runner-up (Junior)	*2013*
Bangladesh Mathematical Olympiad Regional | Champion (Junior)	*2012*

SELECTED PROJECTS

Walkability Dataset | Crowdsourced dataset & research on Dhaka city walkability | repo _2023_
Responsibilities: Database schema design, implemented data-model classes, integrated the backend architecture with Firebase Firestore.

DUStudyLink | Web application for collaborative study materials | repo _2023_
Responsibilities: Database schema design, implemented data-model classes, integrated the backend architecture with Firebase Firestore.

Salvare | Android application for online resource management | repo _2021_
Responsibilities: Implemented data model classes, user navigation, and local database handling using SQL. Created the user interface using Flutter and Dart.

Apellai | Online music streaming application for Android | repo _2021_
Responsibilities: Handling the API calls from streaming services, creating the database schema, integrating with PostgreSQL, and coding the backend using Kotlin Android Studio.

!Typo | Interactive journal application for Windows | repo _2019_
Responsibilities: Written in the C programming language, using the SDL library for GUI.

Other projects on application development, machine learning, etc., can be found on my github.

ACADEMIC SERVICE

IEEE International Conference on Image Processing (ICIP) | _Assisted Review_ _2024_
27th International Conference on Pattern Recognition (ICPR) | _Assisted Review_ _2024_

COURSES & CERTIFICATES

Fundamentals of Reinforcement Learning | Coursera _2022-23_
Introduction to Reinforcement Learning by David Silver (2015) | Youtube _2022-23_
Deep Learning Specialization | Coursera _2022-23_
Intro to Machine Learning | Kaggle _2022_
Intermediate Machine Learning | Kaggle _2022_
Python for Everybody 4 Course Specialization | Coursera _2020_

TECHNICAL SKILLS

Programming Languages	Python, C, C++, Java, Dart, Kotlin, SQL, Assembly
Software & Tools	LaTeX, Git, Flutter, Android Studio, PostgreSQL, RegEx

OTHERS

- Coauthor for Higher Secondary ICT guide book | iPublications _2020_
- Dhaka Regional School Football | Regional Champion _2016_
- Executive member | Science Club of The Laboratorians _2013-16_

REFERENCE

Dr. Md. Mosaddek Khan | Homepage
Associate Professor
Department of Computer Science & Engineering
University of Dhaka

Dr. Amin Ahsan Ali | Homepage
Associate Professor
Department of Computer Science & Engineering
Independent University Bangladesh