

RAFIAD SADAT SHAHIR

Lecturer of BRAC University

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📍 Dhaka, Bangladesh

ACADEMIC EXPERTISE

Neural Network Architectures
Spiking Neural Networks
Quantum Machine Learning
Blockchain
Central Bank Digital Currency
Self-Sovereign Identity

SKILLS

Languages: Python, JavaScript, C++, C, SQL, Java, Solidity.
Technologies: Github, Latex, Packet Tracer, VS Code, MySQL, MongoDB.
Frameworks: Numpy, Pandas, Tensorflow, ReactJs, NodeJs, JWT, OpenGL, OpenSSL.
OS: Windows, Linux.

EDUCATION

- 1/2020 - 1/2024 **Bachelor of Science (BSc) in Computer Science and Engineering (CSE)**
BRAC University, Bangladesh
CGPA: 3.92
- 5/2017 - 5/2019 **Higher Secondary Certificate (HSC)**
Barishal Cadet College, Bangladesh
GPA: 5.0
- 1/2015 - 3/2017 **Secondary School Certificate (SSC)**
Barishal Cadet College, Bangladesh
GPA: 5.0

EXTRACURRICULAR ACTIVITY

- 8/2020 - 6/2022 **Executive, Event Management**
Robotics Club of BRACU, Bangladesh
• Been a member of the management teams of different events.
- 6/2021 - 3/2022 **Member, Sensor and Circuit team**
BRACU Duburi, Bangladesh
• Learned designing PCBs.
- 12/2021 - 3/2022 **Member, Electronics team**
BRACU Mangol Tori, Bangladesh
• Designed module for BTS7960 in EasyEDA.

EXPERIENCE

- 5/2024 - Present **Lecturer**
BRAC University, Bangladesh
• Algorithms
• Theory of Computation
• Artificial Intelligence
- 1/2024 - 5/2024 **Adjunct Lecturer**
BRAC University, Bangladesh
• Theory of Computation
• Artificial Intelligence
- 6/2022 - 12/2023 **Undergraduate Teaching Assistant**
BRAC University, Bangladesh
• Algorithms

RESEARCH

- Neural Network **Connected Hidden Neurons (CHNNet): An Artificial Neural Network for Rapid Convergence**
Rafiad Sadat Shahir, Zayed Humayun, Mashrufa Akter Tamim, Shouri Saha, Md. Golam Rabiul Alam.
• TL;DR: We propose an artificial neural network where the hidden neurons, residing in the same hidden layer, are interconnected.
• Link: arxiv.org/abs/2305.10468

PROJECT

MERN Stack, JWT	SkillHub <ul style="list-style-type: none">• A web application that connects undergrad students and companies.• github.com/DeBug51/skill_hub
ReactJs, JWT	Portfolio Website <ul style="list-style-type: none">• A portfolio website.• Link: github.com/DarkerNemesis14/portfolio_website
ReactJs	Books (Frontend) <ul style="list-style-type: none">• The frontend of a website with a mock api endpoint.• Link: github.com/DarkerNemesis14/books_frontend
Numpy	Neural Network Library <ul style="list-style-type: none">• A simple library to test CHNNet with other feed forward layers.• Link: github.com/DarkerNemesis14/NeuralNetworkAlgorithms
Tensorflow	CHNNet Tests <ul style="list-style-type: none">• The repository contains codes for testing CHNNet against FNN using Tensorflow.• Link: github.com/ThesisG/CHNNetTests
Python, C++	Algorithms Repository <ul style="list-style-type: none">• The repository contains solutions to some popular algorithmic problems.• Link: github.com/DarkerNemesis14/Algorithms
OpenGL, Pygame	Bowling Game <ul style="list-style-type: none">• A simple Bowling game.• Link: github.com/DarkerNemesis14/BowlingGame_OpenGL
Arduino Uno	Object Avoiding Fire Fighter Robot <ul style="list-style-type: none">• A robot that extinguishes fire avoiding obstacles in its path.• Link: github.com/DeBug51/Object_Avoiding_Fire_Fighter_Robot
Arduino Uno	Sonar Radar <ul style="list-style-type: none">• A radar system that uses ultra-sonic sound to detect objects.• Link: github.com/DarkerNemesis14/Sonar_Radar_with_Arduino

AWARDS AND HONORS

9 Semesters	Merit Scholarship BRAC University, Bangladesh
7 Semesters	VC's List BRAC University, Bangladesh
4 Semesters	Dean's List BRAC University, Bangladesh

LANGUAGE

Bengali: Native, **English:** Full Professional.

REFERENCE

Md. Golam Rabiul Alam, PhD

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