RAFIAD SADAT SHAHIR

Graduate of BRAC University

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Dhaka, Bangladesh
DarkerNemesis14

ACADEMIC EXPERTISE

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

SKILLS

Languages: Python, JavaScript, C++, C, SQL, Java, Solidity, Dart.

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

6/2022 - 12/2023 **Undergraduate Teacher Assistant**
BRAC University, Bangladesh
- Helped the corresponding course faculty with the course work.
- Helped the students with their algorithm course.

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**
- A web application that connects undergrad students and companies.
- github.com/DeBug51/skill_hub

ReactJs **Portfolio Website**
- A portfolio website.
- Link: github.com/DarkerNemesis14/portfolio_website

Numpy **Neural Network Library**
- A simple library to test CHNNet with other feed forward layers.
- Link: github.com/DarkerNemesis14/NeuralNetworkAlgorithms

Python, C++ **Algorithms Repository**
- The repository contains solutions to some popular algorithmic problems.
- Link: github.com/DarkerNemesis14/Algorithms

OpenGL, Pygame **Bowling Game**
- A simple Bowling game.
- Link: github.com/DarkerNemesis14/BowlingGame_OpenGL

Arduino Uno **Object Avoiding Fire Fighter Robot**
- A robot that extinguishes fire avoiding obstacles in its path.
- Link: github.com/DeBug51/Object_Avoiding_Fire_Fighter_Robot

Arduino Uno **Sonar Radar**
- A radar system that uses ultra-sonic sound to detect objects.
- Link: github.com/DarkerNemesis14/Sonar_Radar_with_Arduino

Tensorflow **CHNNet Tests**
- The repository contains codes for testing CHNNet against FNN using Tensorflow.
- Link: github.com/ThesisG/CHNNetTests

AWARDS AND HONORS

1/2021 - 1/2024 **Merit Scholarship Based on BracU Academic Results**
BRAC University, Bangladesh

1/2024 **Highest Distinction**
BRAC University, Bangladesh

1/2024 **VC's List**
BRAC University, Bangladesh

LANGUAGE

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

REFERENCE

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