

## MD JUBAIR AHMED SOUROV

**Nationality:** Bangladeshi (+880) 01521331734

Date of birth: 3 Sep 1998

Gender: Male

Email address: <a href="mailto:sourovejubair@gmail.com">sourovejubair@gmail.com</a>

**№ Whatsapp Messenger :** 01521331734

in LinkedIn: linkedin.com/in/md-jubair-ahmed-sourov-a311a6119

Address: Flat 4B, House 32, Road 12, Sector 10, Uttara Dhaka, 1230, 1230 Dhaka (Ba

ngladesh)

## **ABOUT ME**

Passionate engineer, always motivated to learn new skills. I like to brainstorm and solve problems not only research but also for industry. As a robotics engineer, I have proficiency in hardware ranging from microcontroller-based (Arduino) to microprocessor-based (Raspberry Pi) and also software including MATLAB and python.

## **EDUCATION AND TRAINING**

## **BSc in Robotics and Mechatronics Engineering**

**University of Dhaka** [ 1 Jan 2016 - 31 Dec 2019 ]

Address: 1000 Dhaka (Bangladesh)

Final grade: 3.69/4

Thesis: Thesis: REXPLORER: Rescue and Exploration Using Swarm of Robots

Robotics and embedded systems, Internet of Things, Microcontroller and PLC, Computer Vision (Pytorch, TensorFlow), **Artificial Intelligence**: Machine Learning, Deep Learning, Reinforcement Learning, MATLAB

## **MSc in Robotics and Mechatronics Engineering**

**University of Dhaka** [ 1 Feb 2020 – 10 Mar 2022 ]

Address: 1000 Dhaka (Bangladesh)

Final grade: 3.69/4

Thesis: Thesis: Leveraging Object Detection by Few-shot Learning with Semantic Feature Analysis

## **WORK EXPERIENCE**

#### Mentor

Bangladesh Robot Olympiad [ 1 Sep 2018 - 31 Dec 2019 ]

City: Dhaka

Country: Bangladesh

- Organized Bangladesh Robot Olympiad hosted by Bangladesh Open Source Network (BdOSN) in collaboration with Department of Robotics and Mechatronics Engineering, University of Dhaka
- Mentored the juvenile participants for the olympiad

## Founder & Manager

www.musophia.com [ 1 Jan 2018 - Current ]

- https://www.musophia.com/

The ultimate platform dedicated to music in Bengali Language

#### **Robotics Instructor**

Mindcraft Labs [ 1 Jan 2019 - 31 Dec 2019 ]

City: Dhaka

Tutored Robotics projects and programming language to high school learners.

## **DIGITAL SKILLS**

Microsoft Office / Adobe Premiere Pro / Adobe Photoshop / Latex: advanced user / LINUX

## **PROJECTS**

# [Funded] Developing an automated screening method of autistic children using their visual attention

[ 1 Mar 2020 - 31 Mar 2021 ]

- Develop a novel method to classify autistic children from typically developed children using eye-tracking data
- Collected data from the Institute of Paediatric Neuro disorder and Autism, BSMMU
- · Analyzed data and develop a Machine Learning model to accurately classify ASD from TD
- Funded by the Ministry of ICT, Peoples Republic of Bangladesh

## [Funded] Rexplorer: Swarm robot based rescue operation and exploration

[1 Feb 2019 - 31 Dec 2019]

- Undergraduate final project to develop autonomous flock of swarm robots for exploration
- Robots driven by microcontroller were coordinated by a central controller

## [Commercial] Air conditioner control system

[ 1 Feb 2020 - Sep 2020 ]

Developed a wireless autonomous intelligent air conditioner controlling system that would turn off the air conditioner by detecting no human presence in the room to save electricity. The system was developed for BR Powergen Ltd (a government-owned power generation company).

## **Hand Gesture Recognition System**

- Collected had gesture data by flex sensors
- Developed a machine learning model for automated detection hand gesture recognition and Americal Sign Language recognition

#### **PUBLICATIONS**

## **Classifying Eye-Tracking Data using Saliency Maps**

[2020]

https://ieeexplore.ieee.org/abstract/document/9412308

Rahman, S., Rahman, S., Shahid, O., Abdullah, M. T., & Sourov, J. A. (2021, January). Classifying Eye-Tracking Data Using Saliency Maps. In *2020 25th International Conference on Pattern Recognition (ICPR)* (pp. 9288-9295). IEEE.

## Simulation of Pattern Formation of Swarm with Minimum Shape Parameters

[2020]

https://ieeexplore.ieee.org/abstract/document/9306556

Abdullah, Md Tahmeed, et al. "Simulation of Pattern Formation of Swarm withMinimum Shape Parameters." 2020 Joint 9th International Conference on Informatics, Electronics & Vision (ICIEV) and 2020 4th International Conference on Imaging, Vision & Pattern Recognition (icIVPR). IEEE, 2020.

#### **RECOMMENDATIONS**

## **Supervisor**

Name: Dr. Sejuti Rahman

Phone number: (+880) 01836800864

Email: sejuti@gmail.com

Postdoc(Carnegie Mellon University, USA)

Postdoc(University of Technology Sydney, Australia)

Ph.D. (Australian National University)

**Assistant Professor** 

Robotics and Mechatronics Engineering Department

University of Dhaka

## **CERTIFICATION COURSES**

## Completed certification courses from coursera.com

[2020]

- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
- Natural Language Processing with Classification and Vector Spaces
- Convolutional Neural Networks in TensorFlow
- Convolutional Neural Networks
- How Google does Machine Learning
- Neural Networks and Deep Learning
- Structuring Machine Learning Projects
- Natural Language Processing with Classification and Vector Spaces
- Sequence Models