## Shutonu Mitra

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#### **EDUCATION**

Military Institute of Science & Technology, Mirpur Cantonment, Dhaka

Bachelor of Science, Computer Science and Engineering, CGPA: 3.65/4.00

Holy Cross College, Tejgaon, Dhaka

Higher Secondary School Certificate, Science, 2017 GPA: 5.00/5.00

Achievements: Honorary Scholarship of Merit

Holy Cross Girls High School, Tejgaon, Dhaka

Secondary School Certificate, Science, 2015 GPA: 5.00/5.00

Achievements: Honorary Scholarship of Merit

## RESEARCH EXPERIENCE

## Student Researcher - Dept of CSE, MIST

Advisor: Dr. Muhammad Nazrul Islam Dec, 2021 - Present

Summery: Machine Learning and AI based research work in the domain of Health

Care and Human Computer Interaction

## Undergradute Thesis - Dept of CSE, MIST

Advisor: Muhammad Shajahan Majib

July. 2021- Mar. 2022

Thesis Title: Detection and Prevention of Cyberbullying from Social Media by Ex-

ploring Machine Learning Algorithms

#### **PUBLICATION**

S. Mitra, T. Tasnim, M. A. R. Islam, N. I. Khan and M. S. Majib, "A Framework to Detect and Prevent Cyberbullying from Social Media by Exploring Machine Learning Algorithms," 2021 International Conference on Computer, Communication, Chemical, Materials and Electronic Engineering (IC4ME2), 2021, pp. 1-4,

doi: 10.1109/IC4ME253898.2021.9768450. View Article

Muhammad Nazrul Islam, Kazi Rafid Raiyan, *Shutonu Mitra*, M. M. rushadul Mannan, Tasfia Tasnim, Ashima Oshin Putul, Sbm Angshu. "Predictis: An IoT and Machine Learning based Application to Predict Risk Level of Cardio-Vascular Disease" BMC Health Services Research Journal Accepted for Publication on Jan, 2023

## KEY SKILLS

- Languages: C, C++, Python, Java, SQL, Matlab
- Web Development: HTML, CSS, JavaScript, PHP, Bootstrap.
- Analytic Skill: Data visualization (Tableu Python and R), Machine Learning (Python), Neural Network (Tensorflow), Natural Language Processing.
- Applications: Eclipse, Visual Studio, Git, VMWare, VirtualBox, MySQL, Oracle, Atom, Matlab, Netbeans, Android Studio, Adobe XD, Figma, Jupyter Notebook

#### **PROJECTS**

**Predictis:** A medical decision making diagnosis system, which is an Android Application that predicts its user's future possibility of having Cardio-vascular diseases using Machine Learning, Data Analytics and IOT. (2021-2022)View Code

PPD Coach: A HCI based research project, for the purpose of recognizing if graphical scenery based multimodal screening tool proves to be more effective than standard screening tool for detection of Postpartum Depression (PPD) in Bangladeshi Mothers. Technologies used are- Android & Graphic Design. (2021-Present)View Code

Cyberbully Detection & Classification: A machine learning, neural network and natural language processing based project with an aim to find the best performing model for detecting and classifying cyberbully from collected Twitter data. (2021)View Code

Opinion Mining of Tweets Related to Mental Health: An Exploratory Data Analysis based project to reflect public opinion related to common mental health problems such as anxiety, depression, OCD, schizophrenia, PTSD etc. through deep learning and transfer learning from collected twitter data. (2021)View Code

**ASMA:** A database project for salon management system built with Oracle for effective employee, customer, inventory, accounts and salon services management system along with online appointment feature, using Oracle, SQL, HTML, CSS and PHP. (2020)View Code

**A Game of Cyphers:** A program in C applying popular encryption algorithms to encrypt the given message. (2018)

# EXTRA -CURRICULAR & LEADERSHIP

- Organizer: National Collegiate Programming Contest 2021
- Volunteer : International Collegiate Programming Contest Dhaka Regional 2019
- Executive Committee Member: MIST Computer Club 2020 2021
- Member: MIST Robotics Club 2018 2021
- Participated in: Inter University Girls' Programming Contest (IUGPC- Season 2) arranged by North South University 2019
- Participated in: International Collegiate Programming Contest Dhaka Regional 2019
- Participated in: National Girls Programming Contest 2018

#### **INTERNSHIP**

Teletalk Bangladesh LTD.

#### REFERENCES

## Dr Muhammad Nazrul Islam

Associate Professor

Department of Computer Science and Engineering (CSE)

Military Institute of Science and Technology (MIST)

Mirpur Cantonment, Dhaka-1216, Bangladesh.

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Professor

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## Dr. T. M. Shahriar Sazzad

Assistant Professor

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