

# Md Rifatul Islam

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## ACADEMIC CREDENTIALS

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February 2017 – July 2022

**Bachelor of Science in Mechatronics and Industrial Engineering**  
Chittagong University of Engineering & Technology (CUET)

**CGPA:** 3.65 on a scale of 4.00 (3.83 in last four terms)

**Class Position:** 6<sup>th</sup>

**Undergraduate Thesis:** A Comparative Approach to Alleviating the Prevalence of Diabetes Mellitus Using Machine Learning

- Analyzed the risk factors of diabetes in Bangladesh
- Developed and compared 14 machine learning models to predict the disease in the early stage

## RESEARCH & PUBLICATIONS

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- **Md. Rifatul Islam**, Semonti Banik, Kazi Naimur Rahman, and Mohammad Mizanur Rahman, A comparative approach to alleviating the prevalence of diabetes mellitus using machine learning, Computer Methods and Programs in Biomedicine Update (2023), doi: <https://doi.org/10.1016/j.cmpbup.2023.100113>.
- Kazi Naimur Rahman, Monowar Wadud Hridoy, Mohammad Mizanur Rahman, **Md. Rifatul Islam**, and Semonti Banik, “Highly Secured and Effective Management of App-Based Online Voting System Using RSA Encryption and Decryption” (Under Review).

## WORK EXPERIENCE

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November 01, 2023 – Present

**Machine Learning Engineer**

Polyfins Technology Inc., Fremont, California, United States

- Working remotely and focusing on AI solutions in healthcare industry

## TUTORING EXPERIENCE

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- Taught mathematics and physics to 12<sup>th</sup> grade students and mentored some engineering university admission test candidates
- Graded and evaluated answer scripts in a tutoring center

## INTERNSHIP & INDUSTRIAL ATTACHMENT

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July 16, 2023 – October 16, 2023

**Machine Learning Engineer (Remote - Intern)**

Polyfins Technology Inc., Fremont, California, United States

- Worked on various tasks including time series analysis, clustering, image classification, feature extraction, and semantic segmentation

May 10, 2022 – May 23, 2022

**Industrial Attachment Trainee**

Unipolar Automation Technologies, Dhaka, Bangladesh

- Learned about basic troubleshooting and controlling an automated industry using PLC, HMI, and CCW Software

October 2020 – November 2020

**Intern**

Pantech Prolabs India Pvt, Ltd., Chennai, India

- Familiarized with several deep learning projects

May 2020 – June 2020

**Data Analytics Virtual Intern**

InsideSherpa

- Learned about comprehensive exploratory data analysis to uncover data patterns and performed rigorous data quality assessment tasks

## TECHNICAL SKILLS

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**Programming Language:** Python | JavaScript | C | MATLAB

**Libraries/Frameworks:** Scikit-learn | Pandas | OpenCV | Keras | TensorFlow | PyTorch | Robot Operating System

**Web/APIs Development:** FastAPI | React | CSS | Bootstrap

**Documentation:** LaTeX, MS Office

**Cloud Computing Service:** Google Cloud Platform

**Version Control:** Git

**Design:** AutoCAD | SolidWorks

**Miscellaneous:** Arduino | Proteus | Tableau | Figma

## PROJECTS

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- Voice controlled robotic vehicle
- Automatic water valve control
- Gastrointestinal disease classification and semantic segmentation
- Handwriting optical character recognition
- American sign language detection using convolutional neural network

## TRAINING & ONLINE COURSE CERTIFICATIONS

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- Completed a 32-hour training on 'Foundations in Digital Forensics with Magnet Axiom Forensic Tool' in association with Bangladesh Hi-Tech Park Authority, Contessa Solutions & Consultants Limited in 2019
- Completed a four-month course on 'Internet of Things' from Oct 2019 to Feb 2020, arranged by Planeter Ltd.
- DeepLearning.AI TensorFlow Developer Specialization – Coursera
- Applied Machine Learning in Python – Coursera
- Machine Learning – Coursera

## STANDARDIZED TEST SCORE

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- **IELTS:** Overall: 7 | Listening: 7.5 | Reading: 6.5 | Writing: 6.5 | Speaking: 6.5

## LANGUAGE PROFICIENCY

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- Bengali (Native Language)
- English

## EXTRACURRICULAR ACTIVITIES

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- **Lab Director | Robo Mechatronics Association, CUET** (2021-2022)
  - Helped the association in arranging various workshops, seminars, and competitions during the event 'Tech Day 2021' in CUET
- **Treasurer | IEOM CUET Student Chapter** (2021-2022)
  - Assisted the team in organizing Inter-University Scientific Poster Presentation Competition
  - Awarded with "IEOM Outstanding Student Chapter Award-GOLD" during our tenure
- **Campus Research Ambassador | Be Researcher BD** (2021-2022)
  - Promoted research activity and developed collaboration between the researchers and enthusiasts
- **Member | LIGHT, a non-profit organization** (2013-2014)
  - Collected funds and ensured education of some underprivileged children

## AWARDS & HONORS

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- **Technical Scholarship** (2017- 2022)  
Awarded based on merits by Chittagong University of Engineering & Technology
- **Runner-up | Formula 1 RC Race Competition** (2018)  
Organized by Andromeda Space & Robotics Research Organization in CUET
- **12<sup>th</sup> | Standard Chartered International School Chess Tournament** (2010)

## REFERENCES

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CUET  
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Sanjeeb Roy  
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CUET  
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