Md Rifatul Islam

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ACADEMIC CREDENTIALS

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:** 6th **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

- **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, *Heliyon* (2024), doi: https://doi.org/10.1016/j.heliyon.2024.e25373.

WORK EXPERIENCE

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

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

INTERNSHIP & INDUSTRIAL ATTACHMENT

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 deep learning frameworks, libraries and worked on several 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

Programming Languages: Python | MATLAB | C | SQL | JavaScript   **Version Control:** Git
Libraries/Frameworks: Scikit-learn | Pandas | OpenCV | Lightly SSL | Keras | TensorFlow | PyTorch | ROS
Development Tools: Google Colab | VS Code | Google Cloud Platform   **Documentation**: LaTeX, MS Office
Web/APIs Development: HTML | CSS | React | FastAPI   **Design:** AutoCAD | SolidWorks
Miscellaneous: Arduino | Proteus | Tableau | Figma | Factory I/O

PROJECTS

- 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

- 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 hands-on course on Internet of Things from October 2019 to February 2020, arranged by Planeter Ltd.
- DeepLearning.AI TensorFlow Developer Specialization – Coursera
- Applied Machine Learning in Python – Coursera
- Machine Learning – Coursera

STANDARDIZED TEST SCORE

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

LANGUAGE PROFICIENCY

- Bengali (Native Language)
- English

EXTRACURRICULAR ACTIVITIES

- **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

- **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
- **12th | Standard Chartered International School Chess Tournament** (2010)

REFERENCES

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