

MD. RAHAT-UZ-ZAMAN

Student

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Inquisitive, ambitious Deep Learning and Computer Vision enthusiast, proficient in Machine Learning, Artificial Intelligence and Image Processing with a strong foundation in mathematics, propositional logic and programming. Seeking to leverage solid expertise in collaboration, communication and development as a programmer. Open to higher studies and research opportunities.

EDUCATION

B.Sc. in Computer Science and Engineering (CSE)

Khulna University of Engineering & Technology (KUET) Khulna

2016 – 2020 CGPA: 3.66 out of 4

Higher Secondary School Certificate (HSC)

Birshreshtha Noor Mohammad Public College (BNMPC) Dhaka Board

2014 – 2015 GPA: 5 out of 5

Secondary School Certificate (SSC)

Engineering University School and College (EUSC) Dhaka Board

2008 – 2013 GPA: 5 out of 5

ACADEMIC ACHIEVEMENTS

Dean's Award

2nd and 3rd Year.

Vocational Scholarship

For all 4 years.

Top 5% in the class

Hardworking and excellent lab works.

Class Representative

For 3 consecutive years.

TECHNICAL SKILLS

Programming/Scripting Languages

Python, Java, C, C++, Bash, PL/SQL, R, C#, php, html, CSS, JavaScript, Assembly

Frameworks and DBMS

Django, PyQt, Tkinker, .NET Framework, Bootstrap, jQuery, Unity Game Engine, SQLite, SQL Server, Junit, Git

Libraries and APIs

OpenCV, Keras, PyTorch, TensorFlow, Firebase, Scikit-Learn, XGBoost, Librosa, Docker, GLUT, Heroku

Major Undergraduate Courses

Machine Learning, Computer Vision, Image Processing, Deep Learning, Natural Language Processing (NLP), Software and Hardware project management, Object Oriented Programming (OOP), Algorithm and Data Structure, Relational database scheme design, Web Programming and Development, Compiler Design Structural and Functional programming, Computer Graphics

Operating System Expertizes

Arch Linux, **Ubuntu**, **Raspbian**, **Debian**, **Deepin**, Linux Mint, MX Linux, **Windows**, Fedora, MacOS and 10+ other Linux distro.

RESEARCH WORKS

Handwritten Numeral Recognition Integrating Start-End Writing Measure with Convolution Neural Network Thesis work of final year.

2019 KUET, Khulna

Agglomerative Clustering of Handwritten Numerals to Determine Similarity of Different Languages

Accepted in 22nd international conference ICCIT, 2019, South East University, Dhaka.

2019 South East University, Dhaka

Audio Future Block Prediction with Conditional Generative Adversarial Network

Accepted in $3^{\rm rd}$ international conference ICECTE, 2019, RUET, Rajshahi.

2019 RUET, Rajshahi

Road Network Shortest Path Analysis of Dhaka Using Different GIS Techniques

Will be submitted to Journal of Computers & Geosciences. 2020 ELSEVIER

Office Document Generation from Handwritten Documents with Flowcharts

Will be submitted to IEEE 10 Symposium, 2020, Dhaka.

2020 Bangladesh

VISION-IT: A Novel Approach for Blind to Help hear what is in Front.

Will be submitted to IEEE 10 Symposium, 2020, Dhaka.

2020 Bangladesh

RESEARCH INTERESTS

Computer Vision, Image Processing, Natural Language Processing (NLP), Deep Learning,

Reinforcement Learning, Internet of Things

ACHIEVEMENTS in CO-CURRICULAR ACTIVITIES

4th, IEEE YESIST12 Maker Fair, Thailand

Among 70 teams from 20 countries.

September, 2019 Stamford International University, Bangkok

$Finalist, IEEE \, SS12 \,\, Innovation \,\, Challenge, Sri \,\, Lanka$

Among 46 teams from 16 countries.

September, 2018 NSBM Green University, Colombo

Participant, HULT Prize Regional Finale, Malaysia

1,600,000 students from 120+ countries participated in the on-campus round to compete in the finale.

March, 2019 MaGIC, Kuala Lumpur

Runners up, First Datathon in Bangladesh, Technovation 2.0, Dhaka

Among 50+ national teams.

December, 2019 North South University, Bangladesh

2nd **Runners up, Code Samurai Hackathon 2019, Dhaka** Among 197 national teams.

November, 2019 Dhaka University, Bangladesh

Special Award, Code Samurai Hackathon 2019, Dhaka Among 197 national teams.

November, 2019 Dhaka University, Bangladesh

Champion, Student to Startup, Dhaka

Awarded Bangabandhu Grand worth of BDT 1000000 for startup on a science project.

October, 2019 Bangladesh

Champion, Ignition 2: Project Competition

National Mechanical Fest. Became champion in project showcasing segment among 14 teams.

September, 2019 KUET, Khulna

Champion, YESIST12 on-Campus Selection, Khulna Among 5 teams.

August, 2019 KUET, Khulna

Champion, SS12 Macro Innovation Regional Selection, Khulna

Among 25+ teams.

August, 2018 KUET, Khulna

Champion, University Day Project Show 2019, KUET

August, 2019 KUET, Khulna

Runners Up, HULT Prize Campus Round, KUET Among 20+ teams.

Among 20+ teams

2019 KUET, Khulna

Runners Up, University Day Poster Presentation 2019, KUET

Among 25+ teams.

August, 2019 KUET, Khulna

Runners Up, ULAB EEE Fest Poster Presentation, ULAB Among 20+ teams.

September, 2019 University of Liberal Arts, Dhaka

Best 2k15 Team, Intra KUET Programming Contest 2019, KUET

Among 80+ teams.

April, 2019 KUET, Khulna

Best Project Award, Fablab Workshop, KUET

Developed Smile detection camera in raspberry pi. Among 8 teams attending the workshop.

2017 KUET, Khulna

Champion, Intra University Math Olympiad, KUET

Among 60+ participants.

March, 2016 KUET, Khulna

Champion, Intra-College Math Olympiad, BNMPC

BNMPC, Khulna

Champion, Engineering University School Science Fair, EUSC

2011 EUSC, Khulna

Runners Up, Engineering University School Science Fair, EUSC

2011 EUSC, Khulna

2^{nd} Runners Up, Engineering University School Science Fair, EUSC

2009 EUSC, Khulna

PROJECTS

Vision IT

A smart stick for the blind victims which will vibrate accordingly the distance to an obstacle in front. It can also detect objects and recognize known persons.

Technologies: TensorFlow, OpenCV, Face_recognition, Django, SQLite

GitHub: Currently private (Available on request)

2019 KUET, Khulna

Traffic Rules Violation Detection

Three traffic rules violations are detected using Computer Vision.

Technologies: Keras, PyQt, OpenCV, SQLite

GitHub: rahatzamancse/Traffic-Rules-Violation-Detection
2018 KUET, Khulna

EyeTask

Control Wheel Chair with Eye gaze direction classification. **Technologies:** Keras, OpenCV, Dlib facial landmark, PyQt **GitHub:** rahatzamancse/EyeTask

2018 KUET, Khulna

Bangla + Bangla Phonetics + English Sentiment Analysis with English Translation from Prothom Alo

Automatically scrap Bengali text from Prothom Alo website and apply sentiment analysis on it.

Technologies: Spider web scrapper, NLTK, TextBlob, PyQt **GitHub:** rahatzamancse/Bangla-or-Banglish-or-English-Sentiment-Analysis-with-English-translation

2018 KUET, Khulna

AskBD Website

A Quora like question answer website.

Technologies: ASP.NET MVC, ¡Query, Bootstrap, AJAX

GitHub: rahatzamancse/website-ask-bd

2018 KUET, Khulna

We Cheaters android app

Keyboard shortcuts sharing app.

Technologies: Firebase, Android Studio

GitHub: rahatzamancse/android-app-we-cheaters

2017 KUET, Khulna

PROGRAMMING CONTESTS

Kaggle, Halite, HackerRank, Codeforces, Uva Online Judge and several online Machine Learning and Competitive Programming websites

1000+ problems solved in total.

ACM ICPC Dhaka Online Preliminary Contest

Participated on 4 consecutive years contest.

2020: 201st out of 1805 national teams
2019: 458th out of 1788 national teams
2018: 706th out of 1604 national teams
2017: 1109th out of 1454 national teams

2016-2018 Dhaka

Intra KUET Programming Contest, 2016

Rank: 15th out of 60+ teams.

2016 KUET, Khulna

OTHER PARTICIPATIONS

Google Cloud Next'18 Bangladesh

Organized by Google Cloud Developers Bangla Group.

2018 Asia Pacific University, Dhaka

Round 2 of Channel i Search for Innovators, Season 2 by A2I

2019 Channel i, Dhaka

LEADERSHIP ACTIVITIES

President, Bit2Byte club, KUET

A highly active university club primarily focused on Software Development such as Android Development, Machine Learning, Web Development etc.

2018-2019 KUET, Khulna

Mentored, 5 Workshops on Basic Electronic Building Blocks, American Corner

Managed 5 workshops for students of several schools and colleges to attract them towards electronics and computer science. Organized by American Corner, Khulna with assistance of American Embassy

2018 Northern University, Khulna

Mentored, Several Workshops, Bit2Byte club, KUET

Gave lectures in several workshops on various topics such as Intermediate Android Development, Machine Learning, IoT, Web Development arranged by Bit2Byte.

2018-2019 KUET, Khulna

Mentored, Workshop, HACK club, KUET

Gave training on hands-on Raspberry Pi and Linux based OS on workshops arranged by HACK, Hardware Acceleration Club of KUET.

2018 KUET, Khulna

Mentored, Workshop, SGIPC club, KUET

Helped freshers to get started in competitive programming in different online platforms on workshops arranged by SGIPC, Small Group of People Interested in Programming Contest.

2017 KUET, Khulna

Volunteered, NHSPC

Helped organizing National High School Programming Contest, 2017.

2017 KUET, Khulna

MEMBERSHIPS

SGIPC club, CSE, KUET

Small Group of People Interested in Programming Contest

HACK club, CSE, KUET

Hardware Acceleration Club of KUET

Math club, KUET

For consecutive 4 years

BNMPC Science club, BNMPC

For 2 years

EUHSS Science club, EUSC

For 4 years

LANGUAGES

Bengali Native Proficiency

English Professional Working Proficiency

REFERENCE

Dr. M.M.A. Hashem

Professor

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