

NAME: **SABIT AHMED**
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EDUCATION

2016-2021

Bachelor of Science (B.Sc.) in Computer Science and Engineering

Rajshahi University of Engineering and Technology, Rajshahi, Bangladesh

- Earned 160 credits.
- Undergraduate Thesis Title: "iML-LysPTM: Identification of Multiple Lysine PTM Sites with Different Feature Extraction Methods and Handling Data Imbalance".
- Achieved 80% or higher marks in the following courses: Artificial Intelligence, 'Data Mining', 'Neural Networks and Fuzzy Systems', 'Network Security' and 'Project/Thesis I and Project/Thesis II'.

RESEARCH EXPERIENCE

August 2019 - Present
 (2 years 6 months)

Researcher (H-Index: 2) [Google Scholar](#) [ORCID](#)

Machine Learning Research Group

Rajshahi University of Engineering and Technology, Rajshahi, Bangladesh

Website: <https://www.researchgate.net/lab/Machine-Learning-Research-Group-Md-AI-Mehedi-Hasan>

- Pursuing research on Computational Biology.

WORK EXPERIENCE

February 2021 - Present
 (1 year)

Jr. AI Developer

MyMedicalHUB

Headquarter: 13220 McCormick Drive, Tampa, FL 33626, US

Website: <http://www.MyMedicalHUB.com>

- Working simultaneously on researching and developing automated musculoskeletal health solutions.
- Built cross-platform real-time exercise tracking applications with React-Native framework and Tensorflow.js models.

PUBLICATIONS

Journal Articles

1. **Ahmed, Sabit**, Afrida Rahman, Md. Al Mehedi Hasan, Md Khaled Ben Islam, Julia Rahman, and Shamim Ahmad. "predPhogly-Site: Predicting Phosphoglycerylation Sites by Incorporating Probabilistic Sequence-Coupling Information into PseAAC and Addressing Data Imbalance." Edited by Ozlem Keskin. PLOS ONE 16, no. 4 (April 1, 2021): e0249396. doi:10.1371/journal.pone.0249396. (**Impact Factor 3.24**) [Source-Code](#)
2. **Ahmed, Sabit**, Afrida Rahman, Md. Al Mehedi Hasan, Md Khaled Ben Islam, Julia Rahman, and Shamim Ahmad, "predML-Site: Predicting Multiple Lysine PTM Sites with Optimal Feature Representation and Data Imbalance Minimization," in IEEE/ACM Transactions on Computational Biology and Bioinformatics, doi: 10.1109/TCBB.2021.3114349. (**Impact Factor 3.015**)
3. **Ahmed, Sabit**, Afrida Rahman, Md. Al Mehedi Hasan, Shamim Ahmad, and Shovan, S. M. (2021). "Computational identification of multiple lysine PTM sites by analyzing the instance hardness and feature importance." Scientific reports, 11(1), 18882. <https://doi.org/10.1038/s41598-021-98458-y>. (**Impact Factor 5.133**) [Source-Code](#)

4. Rahman, Afrida, **Sabit Ahmed**, Md Al Mehedi Hasan, Shamim Ahmad, and Abdollah Dehzangi. "Accurately Predicting Nitrosylated Tyrosine Sites Using probabilistic sequence information." (**Under Revision** in Gene - Elsevier) [Source-Code](#)

Conference Paper

1. Rahman, Afrida, **Sabit Ahmed**, Julia Rahman, and Md Al Mehedi Hasan. "**Prediction of Formylation Sites by Incorporating Sequence Coupling into General PseAAC**." In 2020 IEEE Region 10 Symposium (TENSYP), pp. 921-924. IEEE, 2020.

PROJECTS

(August 2021 – Present)

1. **AI COACH (Android [GitHub Link](#) and iOS [GitHub Link](#))**

- It is a virtual therapist which can guide patients for the correct movements of an exercise.
- Designed for mobile devices (Android and iOS).
- Developing AI driven musculoskeletal solutions with computer vision, natural language processing
- Deploying custom-trained and converted models, face and pose detection models with react-native framework.

(August 2019 – Present)

2. **Post-Translational Modifications (Research Project) [ResearchGate](#)**

- Developed **3** single label predictors, such as Formyl_Pred, predPhogly-Site, and PredNitro which correspond to formylation, phosphoglycerlation, and nitrotyrosine sites prediction individually.
- Constructed **2** multi-label predictors predML-Site, and iMul-kSite for predicting acetylation, crotonylation, methylation, succinylation, and glutarylation sites simultaneously.

Web-servers:

- [predPhogly-Site](#)
- [PredNitro](#)
- [predML-Site](#)
- [iMul-kSite](#)

PERSONAL SKILLS

Language

Bangla (Native)

English (IELTS Band Score **7.0** by the IDP [**Valid until 19 November, 2023**])

Hard skills

Language and Frameworks

- Python, MATLAB, C++, PHP, JavaScript, React Native, Vue, Kotlin, Swift
- Django, Flask, Docker, SQLite, SQL, NoSQL(MongoDB), Android Studio, XCode, Git

Data Analysis and Machine Learning

- Data Analysis, Feature Engineering, Model Development, Machine Learning, Basic statistics, Web Scraping, Image Processing
- Pandas, Numpy, Seaborn, Matplotlib, Plotly & Cufflinks
- TensorFlow, PyTorch, Computer Vision, Pose and Face Detection, Body Segmentation
- Bioinformatics, Computational Proteomics, Protein Sequence Analysis, Multi-Label Metrics
- Problem solving, Self-motivation, Ability to work under pressure, Multi-tasking
- Communication, Teamwork, Leadership

Soft Skills

MEMBERSHIP AND CERTIFICATIONS

December 2019 -
December 2021
(2 years)

Student Member

IEEE

- Maintained professional networking with the benefit of career resources and recognition.

November 2021 -
Present

Full Member

Sigma Xi, The Scientific Research Honor Society

Certifications

Issued by University of Michigan (Coursera Platform)

- Programming for Everybody (Getting Started with Python)
- Python Data Structures
- Building Web Applications in PHP

Issued by IEEE

- Certificate of appreciation for a successful presentation on "Prediction of Formylation Sites by Incorporating Sequence Coupling into General PseAAC"

**VOLUNTEER
EXPERIENCE**

March 2018 - February
2021

(3 years)

Secretary (IT)

RUET Career Forum

- Publicized 3rd and 4th RCF Career Fair as coordinator.
- About 2+ years of experience in planning, fundraising, publicizing, etc.

REFEREES

4th Year Thesis
Supervisor

Dr. Md Al Mehedi Hasan

Professor

Department of Computer Science and Engineering
Rajshahi University of Engineering and Technology
Rajshahi-6204, Bangladesh.

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Julia Rahman

Assistant Professor

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and Collaborator

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