## S M Rafiuddin Rifat

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#### **OBJECTIVE**

To obtain a career in Research and Development in Computer Science arena.

#### **EDUCATION**

## Master of Science in Computer Science and Engineering

Ongoing

Department of Computer Science and Engineering (CSE)

Bangladesh University of Engineering and Technology (BUET), Dhaka.

Theory Courses Taken:

- Bioinformatics Algorithms
- Computational Biology
- Advanced Algorithms
- Meta-Heuristics
- Graph Theory
- Advanced Artificial Intelligence

Ongoing Thesis: Semi-supervised Image Generation and Augmented Classification using Deep Convoluted Generative Adversarial Networks.

Under the supervision of Dr. Muhammad Abdullah Adnan.

### Bachelor of Science in Computer Science and Engineering

2016

Department of Computer Science and Engineering (CSE)

Rajshahi University of Engineering and Technology (RUET), Rajshahi.

# STANDARDIZED TEST SCORES

- GRE General Test (Verbal Section 152, Quant Section 160, AWA 3.5)
- TOEFL iBT (Reading , Speaking , Listening , Writing , Total )

## RESEARCH AREA

- Machine Learning
- Deep Learning
- Computer Vision
- Pattern Recognition

## RESEARCH INTEREST

- Generative Adversarial Network
- Graph Neural Network
- Geometric Deep Learning
- Data Visualization

(Most Recent First)

PUBLICATIONS Razin, Md Jahidul Islam, Md Abdul Karim, M. F. Mridha, S M Rafiuddin Rifat, and Tahira Alam. "A Long Short-Term Memory (LSTM) Model for Business Sentiment Analysis Based on Recurrent Neural Network." In Sustainable Communication Networks and Application, pp. 1-15." Springer, Singapore, 2021.

> Rafiuddin, S. M.. "Estimation of Phylogenetic Tree using Gene Sequencing Data." Electrical Information and Communication Technology (EICT), 2019 4th International Conference on. IEEE, 2019.

> Rafiuddin, S. M.. "Ranking of Bangla word graph using graph based ranking algorithms." Electrical Information and Communication Technology (EICT), 2017 3rd International Conference on. IEEE, 2017.

> Mishu, Sadia Zaman, and S. M. Rafiuddin. "Performance analysis of supervised machine learning algorithms for text classification." Computer and Information Technology (ICCIT), 2016 19th International Conference on. IEEE, 2016.

## **TECHNOLOGY SKILLS**

Programming Languages: C, C++, Java, Python.

Operating System: Linux.

Version Control and Development: Git.

Web Technologies: HTML, CSS, JavaScript, PHP, Django.

Cloud Technologies: Amazon AWS.

Database Technologies: Oracle, MySQL, PL/SQL.

Technical Writing: LATEX

Editing and Design: Adobe Photoshop, Adobe Illustrator.

Library/Framework: OpenGL, NumPy, pandas, MatPlotLib, NLTK, Scikit-learn,

Tensorflow 2.0, PyTorch, Seaborn, LibVips.

Simulator: Matlab, Octave, Multisim, CISCO Packet Tracer, Unity, Blender.

#### **EXPERIENCE**

# Lecturer

October 2018 - Present

Department of Computer Science and Engineering (CSE)

University of Asia Pacific - UAP

74/A Green Road, Farmgate, Dhaka 1215.

(Proposed Host of International Collegiate Programming Contest World Finals, 2022)

- Take theory and lab classes of undergraduate Computer Science program.
- Make questions, evaluate answer scripts and prepare results.
- Supervision of undergraduate Computer Science projects.
- Coach of a Competitive Programming team at RUET IUPC 2019.
- Active participation in Institutional Quality Assurance Cell (IQAC) workshops and Outcome Based Education (OBE).

#### Lecturer

February 2017 - October 2018

Department of Computer Science and Engineering (CSE)

Uttara University

- Take theory and sessional classes of undergraduate CS discipline.
- Make questions, evaluate answer scripts and prepare results.
- Advising students, give guidelines, motivation and instructions in computer programming club and ACM ICPC and NCPC contests.

## COURSES TAUGHT AS LECTURER

## Theory Courses:

- Machine Learning (Spring 2020 UAP, Fall 2020 UAP)
- Pattern Recognition (Fall 2018 UAP, Spring 2019 UAP, Fall 2019 UAP)
- Design and Analysis of Algorithms (Fall 2018 UU, Fall 2020 UAP)
- Operating System Design (Summer 2018 UU)
- Discrete Mathematics (Fall 2017 UU)
- Programming Language and Application II (C++) (Fall 2017 UU)
- Mathematics for Computer Science (Spring 2021 UAP)
- Visual and Web Programming (Fall 2021 UAP)

## Lab Courses:

- Computer Graphics Lab (Fall 2018 UAP, Spring 2019 UAP, Fall 2019 UAP, Spring 2020 UAP, Fall 2020 UAP, Spring 2021 UAP, Fall 2021 UAP)
- Pattern Recognition Lab (Fall 2018 UAP, Spring 2019 UAP, Fall 2019 UAP, Spring 2021 UAP)
- Compiler Design Lab (Fall 2020 UAP)
- Algorithms Lab (Fall 2019 UAP)
- Object Oriented Programming II (Java) Lab (Spring 2021 UAP)
- Visual and Web Programming Lab (Fall 2021 UAP)

## MOOC COURSE CERTIFICATES

#### ACADEMIC COURSES

#### CERTIFICATES Machine Learning

Stanford Univerity, USA, course provided by Coursera

#### Algorithms: Design and Analysis, Part 1

Stanford Univerity, USA, course provided by Coursera

#### **Understanding Research Methods**

University of London, course provided by Coursera

#### **Introduction to Mathematical Thinking**

Stanford University, course provided by Coursera

### **Neural Networks and Deep Learning**

deeplearning.ai

# Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

deeplearning.ai

## Structuring Machine Learning Projects

deeplearning.ai

#### NON-ACADEMIC COURSES

### Cameras, Exposure, and Photography

Michigan State University, USA, course provided by Coursera

#### Camera Control

Michigan State University, USA, course provided by Coursera

### Principles of Photo Composition and Digital Image Post-Production

Michigan State University, USA, course provided by Coursera

# ONLINE PROFILES

- LinkedIn
- GitHub
- Twitter

# RESEARCH PROFILES

[Google Scholar] [Semantic Scholar] [ORCiD] [Scopus]

## VOLUNTARY SERVICES

National High School Programming Contest (NHSPC), Rajshahi.

Volunteer 2016

Divisional Mathematical Olympiad, Faridpur.

Math Olympiad Volunteer (MOVer) 2006

# TRAINING EXPERIENCE

The role and responsibility and ethical principle of the university teachers.

Conducted by the Institutional Quality Assurance Cell (IQAC), Uttara University, Bangladesh February 24, 2018

#### Improving Learning and Teaching Skills (ILTS)

Conducted by University of Asia Pacific

May 5, 2019

#### **AWARDS**

Honorable Mention in ICT Fest, IUT, Gazipur

Islamic University of Technology, Gazipur

2014

Honorable Mention in National Collegiate Programming Contest (NCPC), DIU

Daffodil International University (DIU)

2014

Champion in ICT Olympiad, CSE Fest, RUET

Career Club, Rajshahi University of Engineering and Technology (RUET) 2012

#### REFERENCES

#### Dr. Muhammad Abdullah Adnan

Email: adnan@cse.buet.ac.bd

Associate Professor

Department of Computer Science and Engineering (CSE) Bangladesh University of Engineering and Technology (BUET)

#### Biprodip Pal

Email: biprodip@cse.ruet.ac.bd

Assistant Professor

Department of Computer Science and Engineering (CSE) Rajshahi University of Engineering and Technology (RUET)