# S M Rafiuddin

Address: Stillwater, Oklahoma, USA Cell: +1 405 989 6419 Email: where.is.rifat@gmail.com Institutional Email: srafiud@okstate.edu Website: copotronicrifat.github.io				
OBJECTIVE	Aiming to build a career in Research and Development with a focus on Machi Learning and solving complex challenges that bridge theoretical foundations wi practical applications.			
EDUCATION	<ul> <li>Ph.D. in Computer Science</li> <li>Department of Computer Science</li> <li>Oklahoma State University <ul> <li>Machine Learning</li> <li>Data Structures and Algorithms II</li> <li>Design and Implementation of Operating System</li> <li>Cloud Computing and Distributed Systems</li> <li>Big Data Analytics</li> <li>Introduction to Computer Security</li> </ul> </li> <li>B.Sc. in Computer Science and Engineering Department of Computer Science and Engineering Rajshahi University of Engineering and Technology CGPA: 3.53 out of 4.00</li> </ul>	August 2022 - Present ms II January 2012 - October 2016		
RESEARCH INTEREST	<ul> <li>Machine Learning</li> <li>Deep Learning</li> <li>Natural Language Processing</li> <li>Pattern Recognition</li> </ul>			
EXPERIENCE	Graduate Teaching Assistant Department of Computer Science Oklahoma State University	August 2022 - Present		

- Introduction to Computer Security (Fall 2022): Facilitated learning for 50+ students through interactive discussions, enhancing their understanding of key security principles and practices.
- Design and Implementation of Operating Systems I (Spring 2023, Spring 2024): Led weekly sessions and provided one-on-one mentoring to students, significantly improving their practical skills in OS development.
- Data Structures and Algorithm Analysis II (Fall 2023): Designed and graded complex assignments and exams to assess and reinforce students' problem-solving skills in advanced algorithms.

### Lecturer

October 2018 - July 2022

Department of Computer Science and Engineering (CSE) University of Asia Pacific - UAP 74/A Green Road, Farmgate, Dhaka 1215.

(Host of the 45th International Collegiate Programming Contest World Finals, 2022)

- Led theory and lab classes in the undergraduate Computer Science program, including question preparation, script evaluation, and result compilation.
- Supervised undergraduate projects and coached the Competitive Programming team at RUET IUPC 2019, enhancing practical and competitive skills.
- Actively participated in IQAC workshops and implemented Outcome Based Education (OBE) strategies, contributing to curriculum development and quality assurance.

## Lecturer

February 2017 - October 2018

Department of Computer Science and Engineering (CSE) Uttara University

• Conducted theory and sessional classes for undergraduate Computer Science, encompassing question preparation, script evaluation, and result compilation.

#### STANDARDIZED TEST SCORES

- GRE General Test (Verbal Section 152, Quant Section 160, AWA 3.5)
- TOEFL iBT Test (Reading 23, Listening 26, Speaking 21, Writing 26)
- International Teaching Assistant (ITA) Exam (280/300)

TECHNOLOGY	Programming Languages: C, C++, Java, Python.
SKILLS	<b>Operating System:</b> Linux.
	Version Control and Development: Git.
	Web Technologies: HTML, CSS, JavaScript, PHP, Django.
	Cloud Technologies: Amazon AWS, Docker.
	Database Technologies: Oracle, MySQL, PL/SQL.
	Technical Writing: LATFX.
	Editing and Design: Adobe Photoshop, Adobe Illustrator.
	Library/Framework: NumPy, pandas, MatPlotLib, NLTK, ScikitLearn, Tensor-
	flow, PyTorch, Seaborn.
	Simulator: Matlab, Octave, Multisim, CISCO Packet Tracer, Unity, Blender.
	· · · · · · · · · · · · · · · · · · ·

PUBLICATIONS (Most Recent First)

- Rafiuddin, S. M. , Rakib, M., Kamal, S., & Bagavathi, A. (2024, February). Exploiting Adaptive Contextual Masking for Aspect-Based Sentiment Analysis. Accepted at PAKDD 2024
- Rafiuddin, S. M. Rafiuddin, S. M. (2022, March). High Cursive Complex Character Recognition using GAN External Classifier. In Proceedings of the 2nd International Conference on Computing Advancements (pp. 466-472).
- Karim, M. A., Rafiuddin, S. M., Islam Razin, M. J., & Alam, T. (2022, March). Isolated Bangla Handwritten Character Classification using Transfer Learning. In Proceedings of the 2nd International Conference on Computing Advancements (pp. 11-17).
- Razin, J. I., Abdul Karim, M., Mridha, M. F., Rafiuddin Rifat, S. M., & Alam, T. (2021). 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.

- Rafiuddin, S. M. (2019, December). Estimation of Phylogenetic Tree using Gene Sequencing Data. In 2019 4th International Conference on Electrical Information and Communication Technology (EICT) (pp. 1-5). IEEE.
- Rafiuddin, S. M. (2017, December). Ranking of Bangla word graph using graph based ranking algorithms. In 2017 3rd International Conference on Electrical Information and Communication Technology (EICT) (pp. 1-5). IEEE.
- Mishu, S. Z., & Rafiuddin, S. M. (2016, December). Performance analysis of supervised machine learning algorithms for text classification. In 2016 19th International Conference on Computer and Information Technology (ICCIT) (pp. 409-413). IEEE.

## Theory Courses:

COURSES

TAUGHT AS LECTURER

- 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	ACADEMIC COURSES
CERTIFICATES	• Machine Learning Stanford University, 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

# • Deep Learning Specialization

by *deeplearning.ai* 

	1. Neural Networks and Deep Learning		
	2. Improving Deep Neural Networks: Hyperparameter ularization, and Optimization	tuning, Re	g-
	3. Structuring Machine Learning Projects		
	4. Convolutional Neural Networks		
	5. Sequence Models		
	NON-ACADEMIC COURSES		
	• Photography Basics and Beyond: From Smartphone to DSLR Spe- cialization by Michigan State University, provided by Coursera		
	1. Cameras, Exposure, and Photography		
	2. Camera Control		
	3. Principles of Photo Composition and Digital Image Post-Production		
	4. Photography Techniques: Light, Content, and Shar	ing	
	5. Photography Capstone Project		
ONLINE PROFILES	[LinkedIn] [Github] [Twitter]		
RESEARCH PROFILES	[Google Scholar] [dblp] [Semantic Scholar] [ORCiD] [Scopus]		
VOLUNTARY SERVICES	National High School Programming Contest (NHSPC), Rajshahi. Volunteer	201	16
	Divisional Mathematical Olympiad, Faridpur. Math Olympiad Volunteer (MOVer)	200	)6
<b>TRAINING</b> EXPERIENCEThe role and responsibility and ethical principle of the university Conducted by the Institutional Quality Assurance Cell (IQAC), U BangladeshBangladeshF		s <b>ity teacher</b> ara Universit ruary 24, 201	<b>s.</b> <i>y</i> , 18
	<b>Improving Learning and Teaching Skills (ILTS)</b> Conducted by University of Asia Pacific	May 5, 201	19
AWARDS	Honorable Mention in ICT Fest, IUT, Gazipur Islamic University of Technology, Gazipur	201	14
	Honorable Mention in National Collegiate Programming Contest (NC Daffodil International University (DIU)	PC), DIU 201	14
	Champion in ICT Olympiad, CSE Fest, RUET Career Club, Rajshahi University of Engineering and Technology (RU	ET) 201	12

# **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)

# Dr. Arunkumar Bagavathi

Email: *abagava@okstate.edu* Assistant Professor Department of Computer Science Oklahoma State University