

Sakifa Aktar

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 Sakifa-Aktar
 [uXfVD9oAAAAJ](https://github.com/uXfVD9oAAAAJ) &hl



Objectives

To be a passionate researcher and achieve a position where I can leverage my best potentials to enhance my knowledge and experience in software engineering and artificial intelligence. I am particularly interested in software quality assurance, software testing, automatic generation of tests using machine learning and deep learning, and automated bug fixing. In the future, I want to be a research scholar working in a renowned laboratory to contribute to academia and the software industry by solving real-world problems.

Research Interest

Areas **Focused on.**

- Machine learning
- Deep learning
- Automated Software Testing
- Machine-learning for Public health
- Testing Machine-learning application
- Software quality assurance
- Software bugs

Education

2014 - 2018 **B.Sc. in Computer Science and Engineering**, *Rajshahi University of Engineering & Technology (RUET)*, Bangladesh.

Thesis: *Multi-View 3D Object Retrieval using Autoencoder & Deep Embedding Network*

- CGPA: 3.84 (Out of 4.00)
- Position: 6th (Class size 120)

2013 **Higher Secondary Certificate Examination**, *Rajshahi Collage, Rajshahi*, Bangladesh, *Group: Science*.

GPA: 5.0 (Out of 5.0)

2011 **Secondary School Certificate Examination**, *Rajshahi University School, Rajshahi*, Bangladesh, *Group: Science*.

GPA: 5.0 (Out of 5.0)

Research publications

Journal Article

- 2021 **Sakifa Aktar**, Md. Martuza Ahamad, Md. Rashed-Al-Mahfuz, Shahadat Uddin, A H M Kamal, Salem A. Alyami, Ping-I Lin, Sheikh Mohammad Shariful Islam, Julian M.W. Quinn, Valsamma Eapen and Mohammad Ali Moni, **Machine Learning Approach to Predicting COVID-19 Disease Severity Based on Clinical Blood Test Data: Statistical Analysis and Model Development**, JMIR Medical Informatics, Publisher: Journal of Medical Internet Research. doi:<https://doi.org/10.2196/25884>
- 2020 Md. Martuza Ahamad, **Sakifa Aktar**, Md. Rashed-Al-Mahfuz, Shahadat Uddin, Pietro Liò, Haoming Xu, Matthew A. Summers, Julian M.W. Quinn and Mohammad Ali Moni(2020). **A machine learning model to identify early stage symptoms of SARS-Cov-2 infected patients**. Expert Systems with Applications, Publisher: Elsevier, 160, 113661. doi:<https://doi.org/10.1016/j.eswa.2020.113661>

Conference Proceedings

- 2021 Nayeem Hossain, Md. Martuza Ahamad, **Sakifa Aktar** and Mohammad Ali Moni **Movie Genre Classification with Deep Neural Network using Poster Images**. International conference on information and communication technology for sustainable development (ICICTSD 2020), Bangladesh University of Professionals, Dhaka, Bangladesh. p. 195-199, doi:<https://doi.org/10.1109/ICICT4SD50815.2021.9396778>
- 2019 **Sakifa Aktar**, Mamun, M. A., **Multi-View 3D Object Retrieval using Autoencoder & Deep Embedding Network**, International Conference on Electrical, Computer and Communication Engineering (ECCE), Chittagong University of Engineering and Technology, Cox's Bazar, Bangladesh. doi:<https://doi.org/10.1109/ECACE.2019.8679277>
- 2018 **Sakifa Aktar**, Mamun, M. A., Hossain, M. A., **Comparative Study of Multi-View 3D Object Retrieval with Autoencoder & Deep Embedding Network**, 21st International Conference of Computer and Information Technology (ICCIT), United International University, Dhaka, Bangladesh. doi:<https://doi.org/10.1109/ICCITECHN.2018.8631920>

Working On

- 2021 Md. Martuza, Ahamad, **Sakifa Aktar**, Md. Jamal Uddin, Md. Rashed-Al-Mahfuz, AKM Azad, Shahadat Uddin, Salem A. Alyami, Iqbal H. Sarker, Pietro Lio, Julian M.W. Quinn and Mohammad Ali Moni. **Adverse effects of COVID-19 vaccination: machine learning and statistical approach to identify and classify incidences of morbidity and post-vaccination reactogenicity** doi:<https://doi.org/10.1101/2021.04.16.21255618> (Under Review on the journal Scientific Reports, publisher: Nature)

- 2021 **Sakifa Aktar**, Ashis Talukder, Md. Martuza Ahamad, A. H. M. Kamal, Jahidur Rahman Khan, Md. Protikuzzaman, Nasif Hossain, Salem A. Alyami, AKM Azad, Julian M.W. Quinn, Mathew A. Summers, Teng Liaw, Valsamma Eapen and Mohammad Ali Moni, **Machine Learning and Meta-Analysis Approach to Identify Patient Comorbidities and Symptoms that Increased Risk of Mortality in COVID-19**, link:<https://arxiv.org/abs/2008.12683> (Under Review on the journal- Computers in Biology and Medicine)
- 2021 **Sakifa Aktar**, Md. Martuza Ahamad, Md. Jamal Uddin and Moni, Mohammad Ali Moni **Early stage detection of ovarian cancer based on clinical markers using machine learning approaches**. (Under review on IEEE journal of Translational Engineering in Health and Medicine)

Teaching Experience

Feb 2019 - Present **Lecturer**, Dept. of Computer Science and Engineering, Bangabandhu Sheikh Mujibur Rahman Science & Technology University, Bangladesh.

Teaching-focused academic pathway, alongside PhD research. Various responsibilities focused on improving teaching & Learning across Faculty of Engineering and wider University.

Course Taught:.

- Object oriented programming;
- Software Engineering;
- Machine learning;

Thesis Supervision:.

- A Machine Learning Model to Recognize Human Emotions using Electroencephalogram;
- Detection of four type fruits leaf pathology using convolutional neural network models;
- Movie Genre Classification with Deep Neural Network using Poster Images;

Project Supervision:.

- University admission test Android application
- Department website demo design
- E-commerce website
- Bus schedule management with GPS tracker

Languages

English Fluent in reading, writing, speaking and listening and waiting for IELTS exam schedule at the end of next month

bengali Native

Skills

Programming Languages C, C++, Python, R, MATLAB, JAVA, Assembly, SQL

Machine Learning Keras, Tensorflow, Pytorch, Sci-Kit learn, Google colab

IDE Android Studio, MATLAB, RStudio, Visual studio, NetBeans, Jupyter Notebook

Web Languages PHP, JavaScript

Markup Languages \LaTeX , HTML, CSS, Markdown
Operating Systems Windows, Linux

Awards

2014-2018 Awarded Technical Scholarship from Rajshahi University of Engineering & Technology
2014-2018 Awarded Government Scholarship in Higher Secondary School certificate Examination
2011-2013 Awarded Government Scholarship in Higher Secondary School certificate Examination

Extra-curricular Activities

2017 Visited "Bangladesh Power Development Board" as system analyst
2006-2008 Attended "Girl-guides camping" in 2006 (Dhaka) & 2008 (Rajshahi)

References

Dr. Md. Al Mamun

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