

Tamal Joyti Roy

IT Enthusiast & Passionate Learner

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Education

North Western University

May 2016 - April 2020

Bachelor of Computer Science and Engineering

• **Courses:** Computer Basic and Programming, Mathematics I,II,III,IV, V, Physics I,II,OOP C++, Software Development, Engineering Drawing and CAD Sessional, Digital Logic Design, Data Structures, Algorithms, Discrete Mathematics, Microprocessors and Microcomputers, Numerical Analysis, Electrical Technology, Applied Probability and Queuing Theory, Database Systems, Digital Electronics and Pulse Techniques, Artificial Intelligence and Expert System, Software Engineering, Computer Networks, Neural Networks and Fuzzy Systems, Compiler Design, Parallel and Distributed Processing, Information System Analysis and Design, Telecommunication, Computer Graphics and Pattern Recognition, Robotics and Computer Vision, Information Security and Control, Simulation and Modeling.

Khulna University of Engineering & Technology

MSc in Engineering in Information and Communication Technology

Jan 2021 - Jan 2023

• **Courses:** Medical Imaging Systems, Advanced Digital Image Processing, Advanced Network Security, Soft Computing, Advanced Wireless Communication, Data Warehousing and Mining, Network Management and Security, Computer Applications in Medicine, and Diagnostics.

Skills

Languages: C(Basic), C++ (Basic), Python, LaTeX

Technologies: MySQL, Git

Characteristics: Leadership, teaching, details oriented, problem-solving capabilities

Software: MS Office, IBM Spss, Adobe Photoshop, Illustrator, Open Shot, Libre Office, Weka, RapidMiner Studio

Research Fields: Data Science, Bioinformatics, Machine-learning, Computer Vision, Artificial Intelligence, Image processing

Proud of: Adapt to learning

Interest: Mathematics, Evolution Theory of Human and Animals, Nonfiction Books, Digital Painting

Professional Experience

United We Care

New Delhi, India

Data Scientist

Dec 2021 – Present

- Research
- Data Science for SEO
- Decision Making based on data
- Algorithms implementation
- Design new models
- Repeat process based on feedback

Comfortable With Python Data Science Libraries

- TensorFlow
- NumPy
- Pandas
- Matplotlib
- Keras
- Scikit-Learn

Projects

- Dynamic File handling with C
- Light and Sound Sensors Implementation with Arduino
- Chess Game with Java
- Dynamic Medical Health Care Website
- Prototype Drone Model for Carrying water during dire hazards
- Data mining for finding the correlation of COVID-19 and human fear

On Going Projects

- Blockchain Technologies in Health Care
- OCR Model with TensorFlow and OpenCV

Conference Proceedings

1. Roy, Diti and Roy, Tamal Joyti and Mahmood, Md. Ashiq, An Efficient Approach to Identify Economic Crisis During Covid-19 Outbreaks Utilizing Data Mining (May 25, 2021). Proceedings of the International Conference on Smart Data Intelligence (ICSMDI 2021), Available at SSRN: <https://ssrn.com/abstract=3852813> or <http://dx.doi.org/10.2139/ssrn.3852813>
2. Roy D., Roy T.J., Mahmud I., Alvi N. (2022) An Efficient Approach to Predict Fear of Human's Mind During COVID-19 Outbreaks Utilizing Data Mining Technique. In: Khanna A., Gupta D., Bhattacharyya S., Hassanien A.E., Anand S., Jaiswal A. (eds) International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1388. Springer, Singapore. https://doi.org/10.1007/978-981-16-2597-8_4
3. Tamal Joyti Roy, Md. Ashiq Mahmood and Diti Roy, " An Analytical Model for Prediction of Upcoming ICC T20 World Cup 2021 Using Classification Algorithms," International Conference on Science & Contemporary Technologies (ICSCT), pp. 1-6, 2021
4. Tamal Joyti Roy, Md. Ashiq Mahmood and Diti Roy, "An Efficient Approach to Identify the Key Factors of Failure of Bangladesh Cricket Team in Test Cricket Utilizing Hypothesis Testing and Clustering Method," 5th International Conference on Electrical Information and Communication Technology (EICT), 2021
5. Tamal Joyti Roy, Md. Ashiq Mahmood and Diti Roy, " A Machine Learning Model to Predict Earthquake Utilizing Neural Network," The International Conference on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2-2021), 2021

6. Md. Ashiq Mahmood, Tamal Joyti Roy, Md Ashiqul Amin, Diti Roy, Aninda Mohanta and Fatama Fayezy Dipty, "A Hybrid Approach to Find COVID-19 Related Lung Infection Utilizing 2 Bit Image Processing", International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing (ICICC 2022), 2022
7. Tamal Joyti Roy, Md. Ashiq Mahmood , Aninda Mohanta and Diti Roy, "An Analytical Approach to Predict the COVID-19 Death Rate in Bangladesh Utilizing Multiple Regression and SEIR Model", 2021 IEEE International Conference on Robotics, Automation, Artificial-Intelligence and Internet-of-Things (RAAICON).
8. Diti Roy, Md. Ashiq Mahmood and Tamal Joyti Roy, "A Two-Step Clustering Approach to Measure Soil Quality of Sundarban Based on Organic Carbon and Bulk Density", 2021 IEEE International Conference on Robotics, Automation, Artificial-Intelligence and Internet-of-Things (RAAICON).
9. Tamal Joyti Roy, Md. Ashiq Mahmood, "Global Warming and Bangladesh: A Machine Learning Approach to Analyze the Warming Rate Utilizing Neural Network", International Conference on 4th Industrial Revolution and Beyond (IC4IR) 2021At: Dhaka, Bangladesh
10. Tamal Joyti Roy, Md. Ashiq Mahmood, Diti Roy and Aninda Mohanta , "An Efficient Approach to Validate COVID-19 Related Vaccine Myths Utilizing LDA Algorithm", 2nd International Conference on Computing Advancements.
11. Tamal Joyti Roy, Md. Ashiq Mahmood, Aninda Mohanta ,Diti Roy, Jannatun Tuba Jyoti and Pran Krishna Ghosh, " A Machine Learning Approach to Analyze the Performance of Bangladesh Cricket in T20", 2022 International Conference on Innovations in Science, Engineering and Technology.

Book Proceedings

1. An Efficient Approach to Assess the Soil Quality of Sundarbans Utilizing Hierarchical Clustering Roy, Diti and Roy, Tamal Joyti and Mahmood, Md. Ashiq International Conference on Big Data IoT and Machine Learning (BIM-2021)

Journal

1. Hossain MM, Saha N, Rodela TT et al. Global research on syndemics: a meta-knowledge analysis (2001-2020) [version 1; peer review: 2 approved with reservations]. F1000Research 2022, 11:253 (<https://doi.org/10.12688/f1000research.74190.1>)

Declaration

I certify that the data contained here is appropriate and faithful according to my knowledge.

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