

## CURRICULUM VITAE

### Roshan Jahan

(Member IEEE, ISTE, CSI)

Assistant Professor

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### Brief Intro

I am an Assistant Professor at Integral University, Lucknow. I did masters from Lucknow University, Lucknow. I have 13 years of experience of teaching and research. I am also a member of professional bodies like the Computer Society of India, and IEEE. I am an eminent researcher and published 2 book chapters, 7 Patents along with 21 papers in journals and conferences. My core research area is Artificial Intelligence, Machine Learning and Digital Image Processing.

### Current roles and responsibilities

- An active member of NIRF committee, University got NIRF ranking in Pharmacy after mixed efforts of each member of committee.
- An active member of the University Ranking Committee. University got IIRF ranking after our efforts.
- An active member of NAAC accreditation committee, and working hard for NAAC accreditation.
- In the committee for strategic planning development, I have developed documents related to strategic plans.
- An active member of Alumni Cell, and used to connect with alumni of the university. I used to invite the alumni for guidance and interaction with current students.

### Academic Credentials

- ❖ **Ph.D in Computer Science & Engineering** Pursuing from Integral University, Lucknow, Uttar Pradesh, since 2019.
- ❖ **M.Tech in Computer Science & Engineering** from Gautam Budhha Technical University, Lucknow, Uttar Pradesh with 85.85% in 2014.
- ❖ **B.Tech in Computer Science & Engineering (Gold Medalist)** from Integral University, Lucknow, Uttar Pradesh, with 86.58% in 2010.
- ❖ Intermediate (12<sup>th</sup> Class) from UP Board, Uttar Pradesh with 75.0 % in 2005.
- ❖ High School (10<sup>th</sup> Class) from UP Board, Uttar Pradesh with 71.0 % in 2003.

## Achievements

- ❖ **Gold Medalist** in B.Tech.
- ❖ **Overall Topper** in M.tech.
- ❖ Having **14 years of Teaching Experience** with **3 book chapters, 7 Patents** along with **24 papers in journals and conferences.**
- ❖ Won **Best Paper Award** for paper presentation in International Conference **ACEIT-2016**, and **ACEIT-2018.**
- ❖ Project selected for **DAAD RISE** scholarship program in **2016, 2018,2019, 2020, 2021,2022 and 2023.**
- ❖ Got an invitation from **ACM UK chapter** and visited the UK to pursue research and also supervise undergraduate students in university from **September 2019 to September 2020.**
- ❖ Applied for various projects on **Cognitive Science, IoT, AI, ML** in DST for funding.

## Projects

S. No.	Title of Research Project	Funding Agency	Date of Sanction	Grant/Amount Mobilized (Rs. Lakhs)	Status Ongoing/ Completed
1	Elephant and tiger identification on railway track and roads using image processing	DAAD RISE Germany	15 Feb 2017	1.7 lakh	Completed
2	Brain tumor Detection using MRI images	DAAD RISE Germany	21 Feb 2018	1.7 lakh	Completed
3	Alzheimer Detection using MRI Images	DAAD RISE Germany	21 Feb 2019	1.7 lakh	Completed
4	Brain tumor Detection using MRI images	DAAD RISE Germany	17 Feb 2020	1.7 lakh	Completed
5	Brain tumor Detection using MRI images	DAAD RISE Germany	10 March 2021	1.7 lakh	Completed
6	Intelligent Health Monitoring System	Integral University Lucknow India	19 October 2021	0.70lakh	Ongoing
7	Brain tumor Detection using MRI images	DAAD RISE Germany	17 Feb 2022	1.7 lakh	Completed
8	Brain tumor Detection using MRI images	DAAD RISE Germany	24 Feb 2023	1.7 lakh	Ongoing

## Work Experience

2012-till date

Asst. Professor

CSE Department

Integral University, Lucknow

2010-Apr 2012

Lecturer

B.N.College of Engg. & Technology – Lucknow, U.P

## Patents

1. “Fault Diagnosis Apparatus for Vehicle” Indian Patent, Ref. No./Application No. 372460-001, C.B.R. No. 207152
2. “A System for Medical Imaging and Diagnostics Using Machine Learning and A Method Thereof”, Indian Patent, application number is: 202211064391
3. “A System and Method for Face Detection and Recognition Using Machine Learning And WSN”. Indian Patent, application number is: 202221071843
4. “Device for Detecting Depression using Voice Biomarker”. Design accepted and patent granted by The Patent Office (Intellectual Property Right), GOI. Design No.: 377613-001, Journal No is 11/2023 in the class 24-01.
5. “Detecting Depression using VOICE Biomarkers: A ML Based approach” Indian Patent, application number is: 202321002998
6. “A Real-Time System for Processing a Financial Transaction Between Two Parties Based on Machine Learning” Indian Patent, application number is: 202311003230
7. Early detection of brain tumors using Machine Learning Techniques, Indian Patent, application number is: 202311002997

## Publications

### Book Chapters

1. Roshan Jahan, Manish Madhav Tripathi, Multimodal depression detection using machine learning, Academic Press, Pages 53-72, ISBN 9780323911962, 2022.  
(<https://www.sciencedirect.com/science/article/pii/B9780323911962000053>).
2. Roshan Jahan, Ahkeela M. Khanum, Manish Madhav Tripathi, Smart fence to protect farmland from stray animals, Application of Machine Learning in Agriculture, Academic Press, Pages 213-238, ISBN 9780323905503, 2022.  
(<https://www.sciencedirect.com/science/article/pii/B9780323905503000138>)
3. Roshan Jahan; Nida Khan, “Mobile Cloud Computing: A Review of Current Issues, Book Chapter of Cloud Computing: Reviews, Surveys, Tools, Techniques and Applications”, An Open-Access eBook published by HCTL Open, January 2016, ISBN: 978-1-62951-802-2.

## Papers in International Journals and Conferences

1. Jahan, R., & Tripathi, M. M. (2024). Detection of Brain Tumour in MRI Images using Deep Belief Network (DBN). *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 41(1), 154-167.
2. Habiba, U., & Jahan, R. (2023, November). Path Planning for UAV “Drones” Using SARSA: Enhancing Efficiency and Performance. In *2023 International Conference on Integration of Computational Intelligent System (ICICIS)* (pp. 1-6). IEEE.
3. Habiba, U., & Jahan, R. (2023). Unmanned Aerial Vehicle (UAV)'Drones' using Machine Learning. Available at SSRN 4430575.
4. Suman, P., Padhy, S., & Jahan, R. (2022, December). Mechanical Malfunction Detection in Vehicle Using Artificial Intelligence. In *International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics* (pp. 315-323). Singapore: Springer Nature Singapore.
5. Jahan, R., Tripathi, M.M. (2022). Detection of Brain Tumors in MRI Images Through Deep Learning. In: Kaiser, M.S., Bandyopadhyay, A., Ray, K., Singh, R., Nagar, V. (eds) *Proceedings of Trends in Electronics and Health Informatics. Lecture Notes in Networks and Systems*, vol 376. Springer, Singapore. MCN: IU/R&D/2021-MCN0001229, 2022 [https://doi.org/10.1007/978-981-16-8826-3\\_11](https://doi.org/10.1007/978-981-16-8826-3_11)
6. R. Jahan and M. M. Tripathi, "Brain Tumor Detection Using Machine Learning in MR Images," 2021 10th IEEE International Conference on Communication Systems and Network Technologies (CSNT), Bhopal, India, 2021, pp. 664-668. MCN: IU/R&D/2021-MCN0001112
7. Roshan Jahan, Preetam Suman, Deepak Kumar Singh "An Algorithm to Secure Data for Cloud Storage" *Information Technology In Industry* DOI: <https://doi.org/10.17762/itii.v9i1.281>, March 2021.
8. Preetam Suman, Amrit Suman, Roshan Jahan, “An Enhanced AODV Routing Strategy for Secure Communication in VANET” *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, PP: 6286- 6306, Volume 6, July 2021.
9. Roshan Jahan, Deepak Kumar Singh, Preetam Suman, “Brain Tumor Detection in Fmri Images” ‘*International Journal of Innovative Technology and Exploring Engineering (IJITEE)*’, ISSN: 2278–3075 (Online), Volume-8 Issue-8, Page No.:116-120, June 2019.
10. Tom Pries, Roshan Jahan and Preetam Suman “Review of Brain Tumor Segmentation, Detection and Classification Algorithms in fMRI Images”, *Computational and Characterization Techniques in Engineering & Sciences (CCTES-18)*, September 2018.
11. Roshan Jahan et al. “Classification & Prediction Techniques in Data Mining: A Review”. *International Journal of Advanced Research in Computer Science*, [S.I.], p. 43-48, July 2018. ISSN 0976-5697, 2018.
12. Roshan Jahan et al. “Lane Detection Using Canny Edge Detection And Hough Transform On Raspberry Pi” *International Journal of Advanced Research in Computer Science*, [S.I.], p. 85-89, July 2018. ISSN 0976-5697, 2018.

13. Roshan Jahan et al. "Analytical Processing In Data Warehouse: A Review" International Journal of Advanced Research in Computer Science, [S.I.], p. 49-53, July 2018. ISSN 0976-5697, 2018.
14. Roshan Jahan, Preetam Suman, Til Theunissen, "Elephant and Tiger Identification on Railway Tracks/Roads through Image Processing" Global Journal of Pure and Applied Mathematics. ISSN 0973-1768, Volume 13, Number 3, 2017.
15. Nashra Javed, Roshan Jahan, Faisal Ullah Khan "A Step towards Managing Big Data and Confronting its Challenges" Global Journal of Pure and Applied Mathematics. ISSN 0973-1768, Volume 13, Number 3, 2017.
16. Roshan Jahan, Sheikh Fahad Ahmad, Nashra Javed "Analysis of AODV & DSR Routing Protocols in Presence of Malicious Nodes for Hybrid Network", Recent Trends in Parallel Computing. 2016; 3(1): 27–33p, 2016.
17. Roshan Jahan, Nashra Javed, Sheikh Fahad Ahmad, "Cluster Analysis Techniques in Data Mining: A Review" International Journal for Scientific Research & Development, Vol. 4, Issue 02, ISSN (online): 2321-0613, 2016.
18. Roshan Jahan, Preetam Suman "Reliable & Fast Data Transmission Mechanism for Congested Wireless Sensor Network" Advances in Intelligent Systems and Computing, Springer (Scopus indexed), SSN: 2194-5357, 2016.
19. Preetam Suman, and Roshan Jahan, "Detection of malicious node and development of routing strategy in VANET," 2016 3rd International Conference on Signal Processing and Integrated Networks (SPIN), Noida, pp. 472-476, 2016.
20. Roshan Jahan "Reliable Data Transmission Using Improved Packet Retransmission Timeout Calculation for Wireless Sensor Network" International conference on Advancement in Computer Engineering and Information Technology (ACEIT-2016), 2016.
21. Roshan Jahan; Preetam Suman, "Secure Digital Image Watermarking using DWT, SVD and Chaotic Encryption with Genetic Algorithm", HCTL Open International Journal of Technology Innovations and Research (IJTIR), Volume 17, September 2015.
22. Mohd Amir Siddiqui, Roshan Jahan, Ijtaba Saleem Khan "Design and Implementation of Routing Protocol for Detection of Sybil attack in MANET" International Journal of Advance Research in Science & Engineering, Volume 04, Issue 08, August 2015.
23. Sheikh Fahad Ahmad, Anwar A Sheikh, Mohd Haleem, Roshan Jahan, Mohd Atif "Neuro-Fuzzy Technique for Software Effort Estimation" International Journal for Scientific Research & Development, vol-3, pp- 841-844, 2015.
24. Roshan Jahan, "Efficient and Secure Digital Image Watermarking Scheme using DWT-SVD and Optimized Genetic Algorithm based Chaotic Encryption", International Journal of Science, Engineering and Technology Research (IJSETR), ISSN: 2278 – 7798, Volume 2, Issue 10, and October 2013.

### **Workshop/Conference/Seminar Attended & Organized**

1. FDP on "Xcel in Excel" organized by Department of Computer Science & Engineering, Integral University, Lucknow from 22/05/2018 to 28/05/2018.

2. Short Term Course on **“Training Program on Academic Leadership”** Organized by UGC Human Resource Development Center, Aligarh Muslim University, Aligarh. CALAM under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers Teaching (MHRD, Govt Of India) from 2017 09/04/2018 to 12/04/2018.
3. Workshop on **“Core Java Training with Cloudsim using Eclipse”** organized by Department of Computer Science & Engineering, Integral University, Lucknow from 22/03/2018 to 24/04/2018.
4. STC on **“Hyperspectral Remote sensing and its application”** organized by organized by organized by Indian Institute of remote sensing, ISRO, Department of Space, GoI, from 19/02/2018 to 13/03/2018.
5. STC on **“Faculty development planning and management”** organized by organized by National Institute of Technical Teacher Training & Research, Chandigarh from 12/03/2018 to 16/03/2018.
6. Workshop on **“PHP coupled with mini project”** organized by Department of Computer Science & Engineering, Integral University, Lucknow from 19/09/2017 to 20/09/2017.
7. National workshop on **“Remote sensing based maps and geospatial Information”** organized by Indian Institute of remote sensing, ISRO, Department of Space, GoI, on 11 August 2017.
8. National seminar on **“Power of setting goals”** organized by WIE-IEEE student chapter, Integral University on 27th August 2016.
9. Conducted **“International conference on advancement of computer science and information technology (ACEIT)”**, at Integral University, Lucknow as organizing member, on 12<sup>th</sup> March, 2016.
10. Attended 7 days faculty development program on **“MATLAB”** at Integral University, Feb 2016.
11. Attended national workshop on **“Energy Conservation and Energy Audit (ECEA - 2016)** at Integral University, Feb 2016.
12. Attended **International Infosec Meet 2016** at PNBIIT, Lucknow, Jan 2016.
13. Attended National Workshop on **“Entrepreneurship options in the Field of Engineering & Pioneering Internet of Things”** at Integral University, Jan 2016.
14. Attended one day seminar on **“MATLAB”** at Integral University, Sept 2015.
15. Attended national workshop on **“Embedded System and Robotics”** at Integral University, Sept 2015.
16. Attended one day seminar on **“Android Development with HTML5”** at Integral University, Aug, 2015.
17. Attended one day seminar on **“Advanced Risk Machine”** at Integral University, March, 2015.
18. Attended one day seminar on **“Leading the Right Path”** at Integral University, March 2015.
19. Attended national workshop on **“ARM Controlled Robotics”** at Integral University, Feb, 2015.
20. Attended **“International Workshop on Wireless Communication and Sensor Networks-2014”** at IIT-Allahabad.
21. Attended one day seminar on **“MATLAB”** at Integral University, 2014.
22. Organized **“Cloudscape”**, a seminar cum quiz contest at Integral University in April 2013.
23. Organized **‘Sharp Minds’, ‘Audio Visual Masters’, ‘Technical Poster Presentation’, ‘Beat the clock’** and many other events for overall development of students in at Integral University, Lucknow, 2013.
24. Attended one day Workshop on **‘Intellectual Property Rights’** at Integral University on 10th January 2012.

## STRENGTH

- ❖ Strong Organizational skills, ability to handle multiple tasks and thrive in a fast pace, challenging environment.
- ❖ Comprehensive problem-solving abilities, excellent verbal and written communication skills.
- ❖ Solid commitment to academic research, high quality teaching and fostering a positive learning environment for students.
- ❖ Hard working and keen learner

### **PERSONAL DETAILS**

- ❖ Father's Name : Mohd. Maslahuddin Khan
- ❖ Date of Birth : 21-Oct-1988
- ❖ Nationality : Indian
- ❖ Marital Status : Married
- ❖ Hobbies : Music, Reading.

### **DECLARATION**

I, Roshan Jahan hereby solemnly declare that the information furnished above is true and correct to the best of my knowledge and belief.

Place: Lucknow

Date: 12/07/24



**Roshan Jahan**