# Dr. Shabnam Mohamed Aslam

Degree	Field	Institution	Year
	Computer Science and	SRM Institute of Science and Technology,	
PhD	Engineering	India	2017
	Computer Science and	SRM Institute of Science and Technology,	
MS	Engineering	India	2011
MCA	Computer Applications	Bharadhidasan University, India	2004
BSc	Computer Science	Bharadhidasan University, India	2001

Academic Rank: Associate Professor

# **Academic Experience**

## **Academic Appointments**

April 2022 – Present Time	Majmaa University, Associate Professor, Information Technology Dept.
Oct 2018 – Mar 2022	Majmaa University, Assistant Professor, Information Technology Dept.
Jun 2006 – Jun 2018	SRM Institute of Science and Technology, Assistant Professor, MCA
	Dept.
Feb 2004 – May 2005	Vellore Institute of Technology, Teaching Assistant, MCA Dept.
Jun 2004 – Dec 2004	Vidhyanidhy InfoTech, Teaching Faculty, CDAC (Centre for Development and
Advanced Computing), Pune	, India.

## Administrative Appointment

- 1. Oct 2023 to present Time Scientific Research Committee Member, IT Dept., CCIS, Majmaah University
- 2. Oct 2023 to Present Time Quality Unit Member, IT Dept., CCIS, Majmaa University
- 3. May 2025 to Present Time Community Services Unit Member, CCIS, Majmaa University
- 4. 2021 -2022 Exam Committee Member, CCIS, Majmaa University
- 5. Jan 2019 to Present Time IT Council Member, CCIS, Majmaa University
- 6. June 2016 May 2017 Head of the Department, CSIT Dept, SRM Institute of Science and Technology

## Non-Academic Experience:

- 1. From October 2024 Lab Unit Member, CCIS
- 2. From April 2024 Accreditation Unit member, College of Computer and Information Sciences
- 3. From 2023-May Community Services Unit member College of Computer and Information Sciences
- 5. From 2021-2022 Exam Committee Member, College of Computer and Information Sciences
- 6. From 2018 IT Council Member, College of Computer and Information Sciences
- 7. From 2016 -2017 Head Of the Department, Department of Computer Science and Computer applications
- 8. From 2014 2017, Coordinator-Spoken Tutorial, MHRD Program, IIT Mumbai.

## Membership in Professional Organizations

- 1. Life Time Member: Institute of Electrical and Electronics Engineers (IEEE)
- 2. AWS Academy Graduate, AWS Academy Cloud Security Foundations
- 3. EC-Council Certified Ethical Hacker

## **Research Profile**

- 1. Google scholar:https://scholar.google.com/citations?user=KMi7LuIAAAAJ&hl=en
- 2. <u>https://orcid.org/0000-0001-9015-7551</u>
- 3. Web of Science ResearcherIDACH-3282-2022

# **Project Grants**

- 1. Gesture Recognition Algorithm for Visually Blind Touch Interaction Optimization Using Crow Search Method, DSR, Majmaah University, 2020, 12000SAR
- 2. Feature evaluation of emerging e-learning systems using machine learning: An extensive survey, DSR, Majmaah University, 2021, 26000 SAR
- 3. A computer-aided diagnosis system using deep learning for multiclass skin lesion classification, DSR, Majmaah University, 2021, 8000 SAR
- 4. An intelligent disease prediction and monitoring system using feature selection, multi-neural network and fuzzy rules, DSR, Majmaah University, 2021, 8000SAR

# **Honors and Awards**

- 1. Best Paper award, 6<sup>th</sup> International Conference on Systems, Computation, Automation and Networking, Manakula Vinayakar Institute of Technology, India, December 2024
- 2. Best Paper award, 6<sup>th</sup> IEEE International Conference on Engineering Technology and Applied Sciences, UTB, Bahrain, November 2024
- 3. Certificate of Appreciation for Outstanding Performance and Valuable Contribution, Deanship of Student Affairs, Majmaah University, 2022
- 4. Certificate of Thanks and Appreciation for Excellency, College of Computer and Information Sciences, Majmaah University, Al Majmaah, November, 2020.
- Certificate of Appreciation in recognition of effective participation in the establishment of the "Master in Data Science Program", College of Computer and Information Sciences, Majmaah University, Al Majmaah, January 2020
- 6. Received cash award for research contribution in August 2015, Directorate of Research, SRM Institute of Science and Technology.

## Service Activities (within and outside of the institution):

- 1. Reviewer IEEE Access
- 2. Reviewer JEAS
- 3. Reviewer Journal of Intelligent and Fuzzy Systems
- 4. Reviewer Scientific Reports

## **Journal Publications**

- 1. Aslam SM. Generative Artificial Intelligence for the Automated Generation of Medical Reports: A Modified Poor and Rich Optimization (MPRO)-Based Approach. Traitement du Signal. 2025 Feb 1;42(1):409.
- 2. Aslam SM, Almutairi L, Fathima R, Prabha S. DDoS Attack Detection using Deep-Learning Tool with Fused Features and Random Forest Classifier.
- 3. Rashmi, R., Umapathy, S., Alhajlah, O., Almutairi, F., & Aslam, S. M. (2024). Design and Development of Portable Body Composition Analyzer for Children. *Diagnostics*, *14*(23), 2658.
- 4. Umapathy S, Alhajlah O, Almutairi F, Aslam S, RK A. F-Net: Follicles Net an efficient tool for the diagnosis of polycystic ovarian syndrome using deep learning techniques. Plos one. 2024 Aug 15;19(8):e0307571.
- 5. Kesavapillai AR, Aslam SM, Umapathy S, Almutairi F. RA-XTNet: A Novel CNN Model to Predict Rheumatoid Arthritis from Hand Radiographs and Thermal Images: A Comparison with CNN Transformer and Quantum Computing. Diagnostics. 2024 Aug 30;14(17):1911.
- L.Almutairi, SM.Aslam, "A Novel Energy and Communication Aware Scheduling on Green Cloud Computing", Computers, Materials and Continua, November 2023, DOI: <u>https://doi.org/10.32604/cmc.2023.040268</u>
- R. K. Karn, V. E. Jesi and S. M. Aslam, "Spam Email Detection Using Machine Learning Integrated In Cloud," 2023 International Conference on Networking and Communications(ICNWC), Chennai, India, 2023, pp. 1-8, doi: 10.1109/ICNWC57852.2023.10127237.

- V. M. R. Sankari, U. Umapathy, S. Alasmari and S. M. Aslam, "Automated Detection of Retinopathy of Prematurity Using Quantum Machine Learning and Deep Learning Techniques," in IEEE Access, vol. 11, pp. 94306-94321, 2023, doi: 10.1109/ACCESS.2023.3311346. (ISI Q1)
- Ahalya, R.K., Almutairi, F.M., Snekhalatha, S.M. Aslam, RANet: a custom CNN model and quanvolutional neural network for the automated detection of rheumatoid arthritis in hand thermal images. Sci Rep 13, 15638 (2023). https://doi.org/10.1038/s41598-023-42111-3 (ISI Q1)
- Elizabeth Jesi, V., Aslam, S.M. An intelligent disease prediction and monitoring system using feature selection, multi-neural network and fuzzy rules. Neural Computing & Applications 34, 19877–19893 (2022). <u>https://doi.org/10.1007/s00521-022-07527-4</u> (ISI,Q1)
- 11. Guhan, B., Almutairi, L., Sowmiya, S. Aslam. Automated system for classification of COVID-19 infection from lung CT images based on machine learning and deep learning techniques. Scientific Reports 12, 17417 (2022). (ISI, Q1)
- 12. Thenmozhi R, Aslam SM, Jovith AA, Avudaiappan T. Modeling of Optimal Bidirectional LSTM Based Human Motion Recognition for Virtual Reality Environment. Virtual and Augmented Reality for Automobile Industry: Innovation Vision and Applications., Springer Nature Switzerland AG 2022, 9, 161.
- Jovith, A. A., Mathapati, M., Sundarrajan, M., Gnanasankaran, N., Kadry, S., Meqdad, M.N., Aslam S.M, (2022)."Two-Tier Clustering with Routing Protocol for IoT Assisted WSN". CMC-Computers, Materials & Continua, 71(2), 3375–3392. (ISI Q2)
- 14. Shabnam Mohamed Aslam. "Automatic Cloud-based Digital forensics artefacts categorization". JEAS. 2021; 8(2): 45-53. doi:10.5455/jeas.2021110105
- Rajinikanth, V.; Aslam, S.M.; Kadry, S. "Deep Learning Framework to Detect Ischemic Stroke Lesion in Brain MRI Slices of Flair/DW/T1 Modalities". Symmetry 2021, 13, 2080. (ISI Q1)
- Rajinikanth, V., Aslam, S. M., Kadry, S., Thinnukool, O. (2022). "Semi/Fully-Automated Segmentation of Gastric-Polyp Using Aquila-Optimization-Algorithm Enhanced Images". CMC-Computers, Materials & Continua, 70(2), 4087–4105. (ISI Q2)
- Elizabeth Jesi, V., Mohamed Aslam, S., Ramkumar, G., Sabarivani, A., Gnanasekar, A.K. and Thomas,
  P., 2021. "Energetic Glaucoma Segmentation and Classification Strategies Using Depth Optimized Machine Learning Strategies". Contrast Media & Molecular Imaging, 2021. (ISI Q2)
- 18. Mehak Arshad, Muhammad Attique Khan, Usman Tariq, Ammar Armghan, Fayadh Alenezi, Muhammad Younus Javed, Shabnam Mohamed Aslam, Seifedine Kadry, "A Computer-Aided Diagnosis System Using Deep Learning for Multiclass Skin Lesion Classification", Computational Intelligence and Neuroscience, vol. 2021, Article ID 9619079, 15 pages, 2021. (ISI Q2)
- 19. Shabnam M Aslam, "A Solution for Social Education Free Open Source Software teaching through E-Learning Framework", Webology (Scopus SNIP: 0.9), 2021
- 20. Aslam SM, Jilani AK, Sultana J, Almutairi L. Feature evaluation of emerging e-learning systems using machine learning: An extensive survey. IEEE Access. 2021 May 5;9:69573-87. (ISI Q1)
- 21. Sultanaa J,M. Ranib U , Aslam SM , AlMutairi L. Predicting Indian Sentiments of COVID-19 Using MLP and Adaboost. Turkish Journal of Computer and Mathematics Education (TURCOMAT). 2021 Apr 28;12(10):706-14. (Scopus Q4)
- V .Elizabeth Jesi, Shabnam Mohamed Aslam, Ruhi Fatima, 2020, "Deep Learning Based Dynamic Hand Gesture Recognition with Leap Motion Controller", International Journal of Advanced Trends in Computer Science and Engineering, Vol 9, No.5, pp 7309-7315 (Scopus Q4)
- 23. Shirina Samreen, Shabnam Mohamed Aslam, 2020, "Resiliency to Conflicting Behaviour Attack through a comprehensive Trust Management Framework to reduce the uncertainty in a Mobile Ad hoc Network", International Journal of Computer Science and Network Security, Vol. 20 No. 10 pp. 188-198., ESCI.
- S. M. Aslam and S. Samreen, "Gesture Recognition Algorithm for Visually Blind Touch Interaction Optimization Using Crow Search Method," in IEEE Access, vol. 8, pp. 127560-127568, 2020, doi: 10.1109/ACCESS.2020.3006443. (ISI Q1)

- M.Shabnam, S.Govindarajan, 2017, "Survey on the Text Entry Methods used in Touch screen mobile device by visually challenged", International Journal of Advanced Intelligence Paradigms, Vol 9(4) pp 313-325, (SCOPUS Q3)
- M.Shabnam and S.Govindarajan, 2016, "Optimization of Gesture Recognition Algorithm-Aid of Artificial Neural Netwok", Indian Journal of Science and Technology (Thomson Reuters & SCOPUS Q4), Vol 9(48), DOI: 10.17485/ijst/2016/v9i48/101172
- 27. M.Shabnam and S.Govindarajan, 2016, "Gesture Recognition Algorithm: BrailleCoded Gesture Patterns for Touch Screens: Eyedroid", Indian Journal of Science and Technology(Thomson Reuters & SCOPUS Q4), Vol 9(33),DOI: 10.17485/ijst/2016/v9i33/89777
- M.Shabnam and S.Govindarajan,2015, "Framework of Gesture for blind people usable at touch mobile phones", International Journal of Applied Engineering Research, Vol 10, issue 17, pp 37658-37663(SCOPUS Q2)
- 29. M.Shabnam and S.Govindarajan, 2014, "Braille-Coded Gesture Patterns for Touch Screens a Character Input Method for Differently Enabled Persons using Mobile Devices" International Journal of Computer Applications (IF:0.715) Proceedings ICCCMIT 2014(1), pp1-5

## Papers Published in National and International Conferences

- 1. Shabnam MA, "Benign/Malignant Breast Cancer Detection in Histopathology Image using Fused Deep-Learning Features" 2024 IEEE 9th International Conference on Engineering, Technologies and Applied Sciences (ICETAS 2024), November 2024, UTB, Bahrain
- Shabnam SA, Laila A, Ruhi F, Prabha S, "DDoS attack detection using Deep-Learning tool with Fuesed Features and Random Forest Cl,assifier", 6<sup>th</sup> IEEE International Conference on Systems, Computation and Networking, December 2024, MVIT, India
- J Sultana, MS Aslam, L AlMutairi, "Prediction of Sentiment Analysis on COVID-19 Data Using Machine Learning and Deep Learning", 3<sup>rd</sup> International Conference On "Ccode 2020: Computing Communications and Data Engineering", Nov 6-7, SPMVV, 2020.
- 4. International Conference Communication, computing and Information Technology (ICCCMIT), "Braille coded gesture patterns for touch screens-a character input method for differently enabled persons using mobile devices", M. Shabnam, Dr.S. Govindarajan, 2014.
- International Conference on Intelligent Computing and Data Science (ICICDS) 2014, "Survey on Text entry methods used in touch screen mobile devices by visually challenged", Shabnam.M Dr.S.Govindarajan, 2014
- 6. Springer Conference-ICICIC Global, "Eyes Free Interaction System for Differently-abled people in Mobile Device", Shabnam Dr.S. Govindarajan, 2013,
- 7. Springer Conference-ICICIC Global, "Green IT based Environmentally Sustainable Architecture Design", Shabnam Dr.S. Govindarajan R. Yamini, 2013
- International seminar on innovations in Pedagogical Approaches to Secondary & Technical, Vocational educational and Training (TVET), "Smart card based Health care Learning (Specifically designed for rural Students and their parent)", S.Kanchana Devi (Shabnam), Dr.S.Govindarajan, 2010
- 9. National Conference on Computing and Communication Technology, "Dynamic and Re-locatable Security Protocols in Computational Grids", S.Kanchana Devi (Shabnam), Dr.S.Govindarajan, May 2011, Easwari Engineering College.
- National Conference On Advanced Computing and Communication Systems, "An Economical Model for Mass-Health care system using Latest Technology", S.Kanchana Devi (Shabnam), Jeya Kumar, 2011
- National Conference on Recent Developments in mathematics And its Applications, "Aggregation of Wireless sensor Networks", K.M.Uma Maheswari, S.Kanchana Devi (Shabnam),2011, 98th Indian Science Congress, "Grid Enabled Health Care System-HGrid", Dr.S.Govindarajan, S.Kanchana Devi (Shabnam), 2011
- 12. National conference on Advanced Data base Systems, "Software Intelligence in Insurance", S. Kanchana Devi (Shabnam), 2006

#### Workshop Attended

- 1. The Second Annual STEM Education Conference, IBE Forum, Sept. 2024
- 2. Universities and Sustainable Development Goals 2023 Targets and Practices, Majmaah University, 22-23 Jan 2024
- 3. Advisory Committee- 2nd IEEE International Conference on Networking and Communications, , India,2-4 April 2024
- 4. Advisory Committee- 1st IEEE International Conference on Networking and Communications, , India,April 2024
- 5. Speaker-Design and Analysis of Machine Learning Experiments", IEEE sponsred Online STTP on Machine Learning and Deep Learning in Data Science, CARE College of Engineering, July 2023,
- 6. Session Chair-Ist IEEE International Conference on Networking and Communications, 6th April 2023, India
- 7. Resource Person-" Digital Forensics and Cyber Hunt", 3rd Virtual International Conference on Advanced Trends in Communication and Technology, ICATCT, 19 March 2021, India
- 8. Presenter-Seminar on distinguished Women's Research published in ISI-Scopus, Feb 23,2021, Saudi Arabia
- 9. Workshop on Scientific Writing, Views and Experiences, Deanship of Scientific Research, October 2020.
- 10. Workshop on Big Data and Analytics, March 17th-18th, 2016, Department of Computer Applications, SRM University.
- 11. Workshop, EMC Academic Summit 2011, SRM University
- 12. Faculty Development Program, Information Security and Cyber Forensics, April 2008, Valliammai Engineering College
- 13. National Seminar, Emerging trends Database technologies, March 2006, Marian College, Kuttikannam, Kerala.
- 14. Workshop, Effective Guidance and supervision of Student's Projects, Feb 2006, VIT, Vellore
- 15. Workshop, Faculty Training, April 2005, VIT, Vellore

## **Professional Development Activities**

- 1. Trainer, "Study design and Data Collection in Scientific Research", Deanship of Graduate Studies and Scientific Research, Majmaah University, SA, Feb. 2025
- 2. Resource Person, International Conference Global innovations in Computer Science A Multidisciplinary Approach, SRC, India, December 2024
- 3. Speaker, Technical workshop, "Latest trends in Cyber Security, Cybersecurity using Artificial Intelligence and Machine Learning", CCIS, October 30, 2024.
- Resource Person 3rd International Virtual Conference on Advanced Trends in Communication and Technology (ICATCT 2021), Vivekananda College of Arts and Science for Women, Tamil Nadu, India Technical talk on topic "Digital Forensics and Cyber Hunt", 19 March 2021.
- 5. Presented a paper in "Seminar on Distinguished Women's Research published in ISI-Scopus ", Majmaah University, Al Majmaah, Saudi Arabia , 1442.
- 6. Participated in "Faculty Development Program", SRM Institute of Science and Technology, India, February 2022.
- 7. Speaker in Wednesday workshop ""The Importance of AI for graduate students", CCIS, Majmaah University, AI Majmaah, Saudi Arabia, March 2022.
- 8. Conducted Community Service, Workshop in Indian International School Majmaah, Al Majmaah, Saudi Araia, "Al in Day to Day Life", October 2021
- 9. Coordinator, Student Activity "Cyber Security Awareness Day", CCIS, Majmaah University, Al Majmaah, Saudi Arabia, December 2021.
- 10. Delivered Workshop on "Cyber Security and Cyber Security services", CCIS, Majmaah University, December 2019.
- 11. Delivered Workshop on "About Cyber Security and Cyber Security Services", Deanship of Community Services, Majmaah University, December 2019.

- 12. Participated in new stream of Elective course Digital Forensics establishment for graduate and post graduate in female section, Majmaah University, KSA, 2018.
- 13. Curriculum design committee- Master courses. Master of Data Science, Master of Artificial Intelligence and Machine Learning, Majmaah University, KSA, May 2019.
- 14. Workshop Convened, Scilab Workshop, SRM Institute of Science and Technology, Talk To A Teacher project, IIT Bombay, India, April 2014.
- 15. Workshop Convened, Workshop on Web services 2012, Department of Computer Applications, SRM Institute of Science and Technology, India.
- 16. Master Project supervisor, Majmaah University.