Faculty Profile

Name   : Dr. Amita Yadav

Designation   : Associate Professor

Qualifications   : Ph.D., M.Tech

Phone   011-45037193

Email   : amita.yadav@msit.in

Area of Interest/Specialization: Wireless Sensor Network, Computer Net-

                                    -Work, Network Security, Data Mining

Experience   : 25 years

Key Publications

Journal-

1. Amita Yadav, Suresh Kumar "An Enhanced distributed energy efficient clustering protocol for wireless sensor networks" Vol.9, no.11, pp. 49-58, IJFGCN(SERSC), ISSN:2233-7857.ESCI
2. Amita Yadav, Suresh Kumar "A Teaching learning based optimization Algorithm for cluster head selection in wireless sensor networks" Vol. 10, no. 1, pp- 111-122, IJFGCN(SERSC) ISSN:2233-7857.ESCI
3. Amita Yadav, Suresh Kumar "Energy efficient cluster formation in wireless sensor networks using Particle Swarm optimization" Vol.-10(30), pp. 1-6, IJST, ISSN (Print): 0974-6846. Web of Science, UGC
4. Amita Yadav, Suresh Kumar, Singh Vijendra "Network Lifetime Analysis of WSNs using Particle Swarm Optimization" Vol.-132, pp-805-815, Procedia Computer Science, ELSEVIER, ISSN:1877-0509, Scopus
5. A. Garg , N. Batra , I. Taneja , A. Bhatnagar , A. Yadav , S. Kumar "Cluster Formation based comparison of Genetic Algorithm & Particle Swarm Optimization Algorithm in Wireless Sensor Network" Vol.5, Issue.2, pp- 14-20, April 2017, IJSRCSE, E-ISSN: 2320-7639.UGC
6. A. Yadav ,S. Zafar, N. Iftekhar, A. Ahilan, S. N. Kumar and A. Jeyam, "An IoT Method for Telemedicine: Lossless Medical Image Compression Using Local Adaptive Blocks," in IEEE Sensors Journal, Aug. 2022 ,doi: 10.1109/JSEN.2022.3184423. SCIE, impact factor-4.325
7. Shalu, Sonia Rathee, Amita Yadav, Pooja Kherwa, and Rashmi Gandhi. "An intelligent lane and obstacle detection using YOLO algorithm." International Journal of Intelligent Systems and Applications in Engineering 12, no. 3s (2024): 641-648., Impact factor-1.74, Scopus
8. Sonia Rathee, Amita Yadav, Shalu et.al., " Diabetes Prediction using feature engineering and machine learning algorithms with security", Journal of Statistics and Management Systems vol. 27,Issue 2, no. 3s, pp. 273–284,ISSN: 0972-0510, March 2024, ESCI
9. Yadav, A., Rathee, S., Shalu et al. "Advanced Epileptic Seizure Detection Using Deep Learning and Bayesian Optimization" SN COMPUT. SCI. 5, 854 (2024). https://doi.org/10.1007/s42979-024-03201-9 Scopus.
10. Amita Yadav, Navdeep Bohra, Deepti Deshwal, Ashish Kumari, Anamika Rana, in

recognition of the acceptance for publication of the manuscript – "Anomaly Detection In Online Social Media Through Advanced Ai Techniques And Topic Modeling" Manuscript will be published in *Proceedings on Engineering Sciences, Vol. 07, No. 1 (2025) 381-390, doi: 10.24874/PES07.01C.005,* Scopus.

11. Shaily Malik, Nishtha Jatana, Divya Jatain, Geetanjali Sharma, Vaani Garg, Amita Yadav, " Deep Non-Negative Matrix Factorization Model For Clustering-Based Image Denoising" Vol. 06, No. 4 (**2024**) 1889-1896, doi: 10.24874/PES.SI.25.03A.022 . Proceedings on Engineering Sciences, Scopus.

12. Kiran Gulia ,Izhar Ahmad Hamdan, Nilay Datta , Yuvraj Gupta, Phool Kumar, Amita Yadav, Sandeep Mitten and Rajiv Kumar "Machine learning models for personalised healthcare on marketable generative-AI with ethical implications" World Journal of Advanvced and Reviews, ISSN- 25819615,**Sept. 2024**, 23(03), 707–720,Peer reviewed, Google Scholar.

13. yadav, Amita & Mehta, Shalu & Rathee, Sonia & Dhand, Geetika & Mohanty, Sachi & Garanayak, Mamata & Paikaray, Bijay. (10 Feb 2025). Empowering immediate healthcare insights: a deep learning chatbot with modified-CNN and SA-MGO optimisation. International Journal of Embedded Systems. Vol. 17, No 3/4, 17. 10.1504/IJES.2024.10068412, ESCI

14. Nehra, Neelam , Sharma, Geetanjali , Kumar, Parveen , Sheoran, Dinesh & Yadav, Amita (2025) Review of speaker recognition : Concepts, challenges, architectures, and future directions, Journal of Information and Optimization Sciences, 46:1, 121-132, DOI: 10.47974/JIOS-1857, Vol 46 issue-1, 2025, ISSN: 0252-2667, ESCI.

15. Yadav, Amita & Paikaray, Bijay & Pine, Sandipan & Mondal, Jayanta & Mehta, Shalu**.** Interpreted social graph traversal algorithms for enhanced recommendation precision and efficiency in computational applications. International Journal of Applied Nonlinear Science. Vol5, No.1., 2025, ESCI.

Papers presented in Conferences

1. Amita Yadav, Suresh Kumar "Analysis & simulation of Low energy adaptive clustering hierarchy protocol" Advances in Intelligent Systems and Computing-638(Next generation networks) Online ISBN 978-981-10-6005-2, pp.- 361-367, Springer conference, Scopus

2. A. Yadav, N. Batra, H. Gupta, N. Yadav & A. Gupta "Implementation of augmented reality in cricket for ball tracking and automated decision making for no ball" Advances in Computing, Communications and Informatics (ICACCI, 2014) IEEE International Conference on DOI: 10.1109/ICACCI.2014.6968378 pp. 316-321

3. A. Yadav, J. Singh, S. Bhatnagar, K. Goyal and S. Yadav "The Probability Strata: Algorithmic approach to DRDOS in INDIACOM " IEEE conference, 3rd int. conf.on *Computing for Sustainable Global Development ID-37465, 978-9-3805-4421-2,pp 1865-1870.

4. N. K. Khan, E. Alnatsheh, R. A. Rasheed, A. Yadav and Z. Alansari, "A Quantitative Case Study in WSNs: Design and Implementation of Student Smart ID Card," 2020 International Conference on Computing, Electronics & Communications Engineering (iCCECE), Southend, United Kingdom, 2020, pp. 27-32, doi: 10.1109/iCCECE49321.2020.9231173. **Electronic ISBN:**978-1-7281-6330-7

5. Amita Yadav, Sonia Rathee, Shalu, Sheerin "Natural Language Based Naïve Bays Classifier Model for Sentence Classification" international conference on innovative computing and communication (ICICC-2022) , Saheed Sukhdev College, DU, NIT Patna and 19-20 February 2022.Springer, **SCOPUS**

6. Yadav, Amita, Apurav Poriya, Raj Kumar, Sachet Gulia, and Mihir Sharma. "Analysis of Various Chaos Based Image Encryption Methods." In *Proceedings of the 3rd International Conference on ICT for Digital, Smart, and Sustainable Development, ICIDSSD 2022, 24-25 March 2022, New Delhi, India*. 2023.

7. Amita Yadav, Sonia Rathee, Shalu Mehta, Siddhartha sankar Biswas´"Automatic Text Summarization Using Recent Bert Architectures", 12th Virtual International conference proceedings of interdisciplinary Research for sustainable Development (vIRSD)Volume 2, 25 December 2023, ISBN: 978-81-961331-8-4

8. Amita Yadav, Khayati, Sheereen "Dynamic Game Scheme Based Interactive Sanitization Model to Mitigate Prognostic Reverberation of Covid'19" in the 7th International Conference on Innovative Computing and Communication (ICICC-2024) Saheed Sukhdev College, DU, NIT Patna and 16-17 February 2024.

9. Amita Yadav, Sonia, Shalu published a paper on " Energy Efficient Mobile App for Solar Energy using Machine Learning" in the IEEE International Conference on Cognitive, Green and Ubiquitous Computing(IC-CGU), 1-2 March, 2024.

10. Yadav, Amita, Shalu, Sonia, "Automatic coding system for subjective exams using OCR and Semantic similarity" In *Proceedings of the 4th International Conference on ICT for Digital, Smart, and Sustainable Development, ICIDSSD 2024, 23-24 April 2024, New Delhi, India*. 2023.

11. Yadav, Amita, Shalu, Sonia, "Enhancing Gaming Experience with Real Time Posture Detectiom" In *Proceedings of the 4th International Conference on ICT for Digital, Smart, and Sustainable Development, ICIDSSD 2024, 23-24 April 2024, New Delhi, India*. 2023.Khayati, Amita Yadav " Digital Communication System Performance with chi Square Distribution" In *Proceedings of the 4th International Conference on ICT for Digital, Smart, and Sustainable Development, ICIDSSD 2024, 23-24 April 2024, New Delhi, India*. 2023.

12. Khayati, Amita Yadav " Real time health monitoring system for Enhancing Healthcare using Internet of Things" In *Proceedings of the 4th International Conference on ICT for Digital, Smart, and Sustainable Development, ICIDSSD 2024, 23-24 April 2024, New Delhi, India*. 2023.

13. Amita Yadav, Khayati, Sheereen " IOT precision Game Framing with security Management in cooperative Dynamic Environment , in 5th international conference on Data Analytics and Management , ICDAM 2024, 14-15 June 2024.

14. Kartikey Rana, Amita Yadav, Geetanjali Sharma, Aman Dahiya, Neelam Nehra,Khateeb Ahmed Khan "Predictive Modellling based Cardiovascular Disease Risk Assessment using Machine Learning on Physical Examination Data" in 5th International conference on Data Science & Applications ,ICDSA 2024, 17-19 July 2024, at MNIT, Jaipur, India.

Patents

1. An international Patent has been granted to Dr. Amita Yadav along with other inventors named as Parul, Afsar Alam, Sherin Zafar, Geetika Dhand , Kavita sheoran, Sonia, Rathee Tabish Mufti, Faraz Doja, Siddhartha Sankar on 5th may 2021. Title of the patent is "Cartoonify Image Detection Using Machine Learning". patent number- 2021101766

2. An indian Patent has been granted to Dr. Amita Yadav along with other inventors named as Gaurav, Amrinder, Kavita, Shalu,Sanjeev, monica, Amandeep, Nishtha on dated 4-02-2022

.Title of the patent is "IOT based speaker reorganization system" Patent Number- 202211003534 A

3. Meghna Chaudhary, Amita Yadav, Sherin Zafar, Khyati Chopra published an Indian patent on 31-05-2024 titled " A System And Method For Optimizing Target Functions In Marketing Mix Modeling" Application Number – 202411038012

Book Chapter/Books published

1. Published a Book Title" Energy Efficient Routing in Wireless Sensor Network" ISBN: 978-93-89116-20-5 Author- Dr. Amita Yadav, Research India Publication, June 2019.
2. Yadav, Amita. "Green Computing in Wireless Sensor Networks through Energy-Efficient Techniques for Lifetime Improvement." *Green Automation for Sustainable Environment*. CRC Press, 2020. 1-18.
3. Published a Book chapter " Eye Gaze Mouse Empowers people with Disabilities" Disruptive Technologies for society 5.0, sep2021 , Scopus CRC press , ISBN 9781003154686

Awards and Recognitions

1. Received National Award for Outstanding Academic Leader 2024- instituted by the International Institute of organized Research (I2OR) which is a registered MSME with the Ministry of Micro, Small and Medium Enterprises, Government of India
2. Received a Certificate of Excellence in research in year 2022 from MSIT, New Delhi in recognition for outstanding contribution to the quality of Research.
3. Received Appreciation letter by the Institution for organizing an international event in 2024.
4. Received Appreciation letter by the Institution for outstanding performance in academics in 2023.
5. Received Appreciation letter by the Institution for outstanding performance in academics in 2016
6. Participated as a Guest Speaker in a webinar "Effect of NEP on Youth Empowerment and Sports Development" at MSIT , New Delhi, India in Aug 2021
7. Session chair at jamia humdard on 27th Feb 2020. 2nd international conference on ICT for Digital, smart and sustainable development ICIDSSD 27-28 Feb. 2020. ISBN- 978-1-63190-292-5.
8. Session chair at jamia humdard on 25th March 2022. 3nd international conference on ICT for Digital, smart and sustainable development ICIDSSD 24-25 March. 2022. ISBN- 978-1-63190-292-5.
9. Session chair at jamia humdard on 24th April 2024. 4th international conference on ICT for Digital, smart and sustainable development ICIDSSD 23-24 April 2024. ISBN- 978-1-63190-292-5.

Other Contributions

1. Organized an international conference ICAIA2024 on 19-20 march 2024 as Convener in association with WIT, Boston, USA.
2. Organized faculty and student training programs in different domains in March 2021, March

2022, Dec. 2022, November 2023.

3. Established two Computer labs in the institution in yr. 2009 and in 2021.
4. College level AMC in-charge for Three (2008-10) yrs.
5. College level purchase in-charge for two yrs.
6. Convener college Magazine for two years
7. Organizing Committee member ICAIA 2020, international conference on Artificial Intelligence and Application.
8. Served as the Convener of the Institute-Industry Interaction Cell since 2019 . In this role, collaborated with industries to facilitate student internships.
9. Contributed as a Team member in UBA.
10. Organized Girl education awareness Program in Dabri Village as a team member of Unnat Bharat Abhiyan.
11. Team member of Annual Technical Festival 2006, 2010, 2018.
12. Co-Convener- Tech fest 2015.
13. Co-Convener Annual Day 2016.
14. Hardware in-charge at department level from 2006 to 2014 and from 2018 to 2024.
15. Time-Table Incharge-2009,2010,2011.
16. Conduct a University level Project competition CSE/IT branch in 2006.
17. Organized an industrial visit to Suzuki Motors on 5th December 2023.

Memberships of Professional bodies

SMC member of ISTE