

CURRICULUM VITAE

Ms. Shalu Rani

M.Sc. (Mathematics), M.Sc. (Computer Science),

M.Tech. (IT), Ph.D. Pursuing



PAPER PUBLISHED IN JOURNALS

1. Paper Title “**Exploring Python’s Role in Pure Mathematical Analysis**” has been published in IJRMPS, Vol. 9 issue 5, October 2021.
2. Paper Title “**Python Empowered Linear Algebra: A Gateway to Machine Learning**” has been published in Journal of the Oriental Institute, Vol. 77 issue 4, October-December 2024.
3. Paper Entitled “**Artificial Intelligence-Driven Quality Assurance in Indian Higher Education: A Human-Centered Framework for Strengthening NAAC Accreditation**” has been published in Journal “International Advance Journal of Engineering, Science and Management(ISSN: 2393-8048)” on 28th February 2026, Volume: 25, Issue: SE, Pages: 591-598 of the journal.
4. Paper Entitled “**Artificial Intelligence in Mathematics: Advancing Research, Innovation and Knowledge Discovery**” has been published in Journal “International Advance Journal of Engineering, Science and Management(ISSN: 2393-8048)” on 28th February 2026, Volume: 25, Issue: SE, Pages: 602-607 of the journal.

PAPER PUBLISHED IN PROCEEDINGS

1. Presented a research paper “Digital Watermarking-A Safety Tag against Human Humbug” in national conference NISTM-12 organized in Rattan Institute of Technology & Management,saveli(Palwal) & this paper was published in an International Journal “International Journal of New Innovations” (ISSN: 2277-4459) in Vol.1,Issue1,2012.

BOOKS EDITED/AUTHORED

1. Co-Editor of the Edited Book “Emerging Trends in Indian Business: Opportunities and Challenges” with ISBN :978-81-953682-3-5, May 2023.

2. Book titled “Computer Applications in Business” for B.Com. students for GJUST, Hisar, published by Laxmi Book Depot with ISBN: 93-91921-43-9 in
3. Book “Elements of Mathematical Foundations for Computer Science- I” with ISBN – 978-93-91098-36-0 published in 2024.
4. Published a text book “Office Tools” with ISBN no 978-93-83861-70-5 in year 2024 published by National publication house Unique Publication.
5. Published a text book “ऑफिस टूल्स (ऑफिस और स्प्रेडशीट टूल्स) ” with ISBN no 93-86868-69-5 by Laxmi Book Depot in 2025
6. Published a practical book “ऑफिस टूल्स (ऑफिस और स्प्रेडशीट टूल्स) ” with ISBN no 93-86868-98-9 by Laxmi Book Depot in 2025

BOOKS CHAPTERS

1. Chapter “Importance of Statistics in Emerging Trends of Business” published in the Edited Book “Emerging Trends in Indian Business: Opportunities and Challenges” with ISBN :978-81-953682-3-5, published in May 2023.
2. Chapter “Cyber Security Challenges in Digital Transformation” published in the Edited Book “Emerging Trends in Indian Business: Opportunities and Challenges” with ISBN :978-81-953682-3-5, published in May 2023.
3. Chapter “Green IT: A Sustainable Approach” published in the Edited Book “Global Environmental Issues: Challenges and Remedies” with ISBN: 978-81-953682-1-1 published in 2023.
4. Chapter “Contribution of Edge Computing in Sustainable Development” published in the Edited Book “Global Environmental Issues: Challenges and Remedies” with ISBN: 978-81-953682-1-1 published in 2023.
5. Chapter “Role of Digitalized Agriculture in Sustainable Development” published in the Edited Book “Global Environmental Issues: Challenges and Remedies” with ISBN: 978-81-953682-1-1 published in 2023.

PAPER PRESENTED IN SEMINAR/CONFERENCE

1. Presented a paper titled “A Comparative Study of Automatic Text Summarization : From Statistical Baseline To Transformers And Large Language Models” in 6th IEEE International Conference on Recent Trends in Computer Science and Technology

organised by RVS College of Engineering and Technology, Jamshedpur, Jharkhand on 29th and 30th January, 2026.

2. Presented a paper titled “Artificial Intelligence- Driven Quality Assurance in Indian Higher Education: A Human- Centred Framework for Strengthening NAAC Accreditation” in two days International Conference on “Artificial intelligence in education : opportunities, challenges And future pathways ” organized by Manohar Memorial College of Education , Fatehabad (Haryana) on 27th and 28th February, 2026
3. Presented a paper titled “Digital Pathways to Our Cultural Roots” in one day National Seminar “Preserving India’s Cultural Heritage in the Era of Globalization” approved by DGHE, Haryana and organized by Department of Commerce & Economics under the aegis of IQAC of Ch. Ishwar Singh Kanya Mahavidyalaya Dhand- Dadwana, Kaithal on 8th August, 2025.
4. Presented a paper titled “From Trash to Treasure: AI in Sustainable Waste Management” in one day National Seminar “Sustainable Development: Innovation, Challenges, and Pathways to a Resilient Future” approved by DGHE, Haryana and organized by Department of History & Political science under the aegis of IQAC of Ch. Ishwar Singh Kanya Mahavidyalaya Dhand- Dadwana, Kaithal on 23rd August, 2025.
5. Presented a paper titled “NSS and MyBharat: Uniting Youth for Stronger Nation”. in two days International Conference on “National service Scheme: Role of Youth and Educational Institutions” approved by DGHE, Haryana and organized by NSS Units of Manohar Memorial College, Fatehabad (Haryana) on 25th and 26th March, 2025
6. Presented a paper titled “ ICT as a Catalyst for Excellence in Higher Education Institutions”. in one day National Seminar “Strengthening Quality in Higher Educational Institutions: Insights from Accreditation Process and Quality Assurance Systems” approved by DGHE, Haryana and organized by IQAC Arya Kanya Mahavidyalaya, Shahabad Markanda (Haryana) on 18 th January, 2025.
7. Presented a paper titled “ Tech for Equality: Transforming Gender Dynamics in Digital Age” in one day online National Seminar “Role of Women in Socio-Economic Development of India” approved by DGHE, Haryana and organised by IQAC, Women Cell and English department of Guru Brahmanand Kanya Mahavidyalaya on 20 th March, 2025.
8. Presented a paper titled “ Reviving Ancient Wisdom: The Transformative Role of Technology in Indian Knowledge System” in one day National Seminar “Indian Knowledge System: Harmonizing Culture, Philosophy, Science and Economic Thought” approved by DGHE, Haryana and organised by department of English, Arya Kanya Mahavidyalaya , Shahabad Markanda (Haryana) on 22 nd March, 2025.
9. Presented a paper titled “ Sustainable Air Quality Through Green IT and Smart Technology” in one day National Seminar “Air quality Index & Sustainable Solution” approved by DGHE, Haryana and organised by department of Geography, Banwari Lal Jindal Suiwala College, Tosham, Bhiwani (Haryana) on 27 th March, 2025.

10. Presented a Paper titled "Unveiling the Power of Graph Theory: Modeling Complex Systems Across Disciplines" in One Day Online International Conference on "Recent Advancements in Mathematical Sciences" approved by Director of higher Education Panchkula, Haryana and organized by DAV College Sadhaura, Yamunanagar, Haryana on 28th April,2024.
11. Presented a Paper titled "AI in Education: Revolutionizing Learning for the 21st Century" in One Day Multidisciplinary Online National Seminar on Emerging Trends in Basic and Applied Sciences(ETBAS-2024)" approved by Director of Higher Education Panchkula, Haryana and organized by Vaish College, Rohtak on 24th April,2024.
12. Presented a Paper titled "Advancing Natural Resource Management Through Integrated Technologies: Remote Sensing, GIS, AI, and Machine Learning" in an International Conference "Natural Resource Management and Environmental Sustainability for Future Generations" organized by Government College, Hisar and Agriculture Forum for Technical Education of Farming Society(AFTEFS) Vital Biotech, Kota on 20th April,2024..
13. Presented a Paper titled "Driving Sustainability: The Role of Digital Innovation and Data Analytics" in two days International Conference on "Material Science Technology and Sustainable Environment (ICMSTE-2024)" on 18-19 April,2024 at Rao Parhlad Singh Degree College, Mahendergarh, Haryana.
14. Presented a Paper titled "Harnessing Innovation: Exploring the Dynamics of AI Adoption in Startup Environments" in One Day Multidisciplinary International Seminar "Green Horizons:Nurturing Sustainable Entrepreneurship and Start Ups for a Better Tomorrow" approved by Director of Higher Education Panchkula, Haryana and organized by Guru Nanak Girls College, Yamunanagar(Haryana) on 10th April,2024.
15. Presented a paper titled " Leveraging Technology for the Exchange of Indian Knowledge System : A Digital Renaissance" in one day National Conference"Meri Mati Mera Desh" organized by Vaish College,Bhiwani at 22 March,2024
16. Presented a paper titled " An Overview of Python Libraries for Applications in Linear Algebra" in one day International Conference"RTISS 2024" organized by KL Mehta Dayanand College for Women, Faridabad on 20 January,2024
17. Presented a paper titled "Role of Technology in NEP-2020 Implementation" in One Day Inter Disciplinary National Seminar approved by Director of Higher Education, Haryana on the Topic "National Education Policy of India: Opportunities and Challenges" organized by department of Mathematics of Maharaja Aggarsen College, Jagadhri on 31st March,2023.

18. Presented a paper titled “A Pragmatic Approach Towards Green Computing” in One Day Multidisciplinary National Seminar sponsored by Director of Higher Education, Haryana on the Topic “Environmental Conservation and Sustainable Development: A Pragmatic Approach” organized by department Geography of Government College, Hisar on 18th March,2023.
19. Presented a paper titled “Green IT: A Need of The Hour” in One Day Multidisciplinary National Seminar approved by Director of Higher Education, Haryana on the Topic “One Earth to Share and Care: Emerging geographical Issues and Prospects” organized by department Geography of Dayanand College, Hisar on 4th March, 2023.
20. Presented a paper titled “HoneyNets: Trace Your Intruder” in an International Conference” RTISS 2024” organized by TITS, Bhiwani during 3-4 March,2012.
21. Presented a paper titled “Digital Watermarking: A Safety Tag against Human Humbug” in one day National Conference”NISTM 12” organized by Ratan Institute of Technology and Management, Saveli(Palwal) on 28 February,2012

ATTENDED TRAINING PROGRAMME ,ORIENTATION AND REFRESHER COURSES

1. Participated in 4 Months course “Data Analytics with Python” run by IIT Madras on NPTEL SWAYAM Portal from January,2024 to April,2024.
2. Participated in 4 weeks Orientation Programme held at GJUS&T, Hisar from 19.06.2014 to 16.07 2014.
3. Participated in UGC sponsored 8 days Online “NEP Orientation & Sensitization Programme-1” organized by MMTTC, GJUS&T, Hisar from December 13-21, 2023.
4. Participated in 2 weeks Interdisciplinary Refresher Course on “Research Methodology and Data Analysis” from 28th July-10 August,2023 organised by Teaching Learning Centre, Ramanujan College, University of Delhi.
5. Completed 30 weeks training on IBM Rational Automation Tools used for software development life cycle at WebTek Labs Pvt. Ltd., New Delhi from 4th Sep,2008 to 30th April,2009
6. Certified IBM Data Associate for DB2 9 Fundamentals on 8th April,2009.

7. Participated in two week Refresher Course on the theme “AI and Open Research Tools for Advancing Environmental Sustainability” under the Malaviya Mission Teacher Training Programme of University Grant Commission organised by MM-TTC: Ramanujan College, Delhi in Collaboration with St. Joseph College(Autonomous) Irinjalakuda,Kerala from 24 th April,2025 to 7 th May,2025 and obtained grade A+
8. Participated in one day Training Programme on THE POSH ACT 2013 (The Sexual Harassment of Women At Workplace (Prevention, Prohibition and Redressal Act 2013) and UGC Regulation 2015 organized by Tech Trainersand Testers Pune on March13,2026

ATTENDED WORKSHOP / SHORT TERM COURSE/FDPs

1. Participated in two days 7th National Level Workshop on NIRF India Rankings 2026 for Higher Education Institutions organized by Institute of Academic Excellence, Hyderabad on 11th and 12th December,2025
2. Participated in two days online Workshop on “Supercomputing” organized by GL Bajaj Center for Research & Incubation and department of CSE(AIML),GL Bajaj Institute of Technology and Management in collaboration with UPL.C,Govt. of UP from 28 th November-29 th November,2024.
3. Participated in two days workshop on “MATLAB for AI & ML” organised by department of Computer Science & Engineering, GJUS&T, Hisar in collaboration with DesignTech Systems Pvt. Ltd. from 24 th February to 25 th February,2025
4. Participated in a One Day Professional Training and Development Program on "Cyber Security and Safety Measures" on 29th April 2024 organized by Department of Commerce & Computer Science of Govt. College for Women, Hisar and Department of Commerce, Govt. College Barwala (Hisar)
5. Attended a Faculty Development Programme on “Artificial Intelligence And Data Analytics” on 18thMarch – 23rd March 2024 Sponsored by AICTE organised by Department Of Artificial Intelligence And Data Science, Guru Jambheshwar University Of Science & Technology, Hisar-125001, Haryana
6. Attended a Online International Seminar on Ethics in Yoga and Sports held on 2nd March,2024 jointly organised by Dayanand College, Hisar Governed by DAV College Managing Committee, New Delhi) and Navyoga Suryodaya Sewa Samiti,Delhi.
7. Participated in One Week Online Short-Term Course on Machine Learning and its Applications in IoT, Computer Vision and Cloud Computing (MICC-2023) from July 10-

- 14 2023 organised by the Department of Computer Science and Engineering, National Institute of Technology Jamshedpur
8. Participated in One Day National Webinar on “Information Communication Technologies (ICT) Applications in 21st Century” organized by UGC HRDC of North-Eastern Hill University, Shillong on 19th October,2022
 9. Collaborated as Member of Organizing Committee and Participated in One Day National Workshop on “Role of NEP-2020 and NAAC in Sustaining quality in Higher Education” organized by Internal Quality Assurance Cell of Dayanand College, Hisar on 26th March,2023.
 10. Collaborated as Member of Organizing Committee and participated in One Day National Workshop on “Intellectual Property Rights” conducted by Department of Computer Science and Department of Mass Communication of Dayanand College, Hisar on 1st April,2023
 11. Collaborated as Organizing Secretary in One Day Workshop on “Advance Features of Excel” organized by Department of Computer Science Dayanand College Hisar on 9th May,2023
 12. Participated in One Day Workshop titled “Know Your Army” organized by NCC Army and Air Wings of Dayanand College, Hisar on 19th April,2023
 13. Participated in One Day Workshop titled “Kala and Rojgar” organized by Department of Hindi and Department of Sanskrit of Dayanand College, Hisar on 15th April, 2023.
 14. Participated in One Day Workshop titled “DFT and Wave Function Theory Method” organized by Department of Physics of Dayanand College, Hisar on 12th April, 2023.
 15. Participated in 6 Days UGC Approved Short term Professional Development Programme Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching organized by Indira Gandhi National Open University, Staff Training and Research Institute of Distance Education, New Delhi 110068 from 8th May,2023 to 16th May, 2023 and obtained A+ Grade.
 16. Organized an Industrial Induction program as Co Convener on DATA SCIENCE AND CLOUD NETWORKING On 11th Oct. 2022 at 10:00 a.m. in Library Reading Hall.
 17. Organised an Industrial Visit to NCMRWF National Center for Medium Range Weather Forecasting) in Noida on 17 Oct,2022

18. Participated in AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Data Analytics and Machine Learning" from 20/09/2021 to 24/09/2021 at Central University of Jharkhand (Online)
19. Participated in AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Machine Learning with R Programming" from 25/10/2021 to 29/10/2021 at National Institute of Technical Teachers' Training and Research Kolkata (Online)
20. Attended one week FDP on MS Office (Word, Excel, Powerpoint) from 18 May,2022 to 25 May,2022 in Dayanand College, Hisar
21. Attended one week FDP on Recent Trends in Information Technology And Its Applications from 19th July to 25th July conducted online by Patrician College of Arts & Science Affiliated to University of Madras.
22. Attended one week AICTE Sponsored Online Faculty Development Programme on "Information Sources and Learning in Digital Age: Challenges and Prospects" organized by Dr. Bhim Rao Ambedkar Library, Guru Jambheshwar University Science and Technology, Hisar-125001 from November 8-13, 2021
23. Participated in one day workshop on "Ethical Concerns in Research" organized by Department of Mechanical Engineering, Guru Jambheshwar University of Science and Technology, Hisar on Feb 22, 2021.
24. Participated in Seven days online workshop on "LaTeX for Scientific Writing (LaTeX-2021)" organized by Department of Directorate of Distance Education, Guru Jambheshwar University of Science and Technology, Hisar from March 1,2021 to March 7,2021.
25. Participated in Three days online Workshop on "Human Values and Professional Ethics" organized by Internal Quality Assurance Cell, Dayanand College, Hisar from March 16,2021 to March 18 ,2021.
26. Participated in one day Workshop on "Data Analytics Made Easy" organized under the Wiley Webinar Series on April 6, 2021.
27. Participated in one day online author Workshop on "Fundamentals of Publishing in Top Journals" organized by the Department of Business Administration, Maharaja Agrasen Institute of Management Studies ,under the aegis of Internal Quality Assurance Cell, in association with ThinkQuest Club & collaboration with Elsevier on June 16,2021.

28. Collaborated as “Organizing secretary” in Three days Workshop on “ICT and Computer Skills” organized by Internal Quality assurance Cell(IQAC) and Department of Computer Science from April 06,2021 to April 08,2021.
29. Collaborated as “Resource Person” in Three days Workshop on “ICT and Computer Skills” organized by Internal Quality assurance Cell (IQAC) and Department of Computer Science from April 06,2021 to April 08,2021.
30. Collaborated as “Organizing Committee Member” in the National webinar on “Biotechnology: Applications and Perspectives” organized by Department of Biotechnology on March 1 and March 2,2021.
31. Collaborated as “Organizing Committee Member” in the National Workshop on “Human Values and Professional Ethics” organized by Internal Quality Assurance Cell, Dayanand College, Hisar from March 16,2021 to March 18 ,2021.

Many More.....

Add On Courses Coordinator

1. Course Coordinator of “Microsoft Certification with course Code CC-MC-23” Course
2. Course Coordinator of “Web Designing with HTML with course code CC-WC-23” Course
3. Course Coordinator of “Computer Networking with course code CC-CN-23” Course

Awards Won

1. Awarded with **Bhishma The Determination Award** for “Excellence in Instructional Leadership” by Chandigarh Group of Colleges, Jhanjheri (Mohali) on 10th November,2019.
2. Awarded with **Best Teacher Award** by Baba Farid Group of Institutions, Bhatinda on Teachers Day i.e. 5th September, 2023.
3. Awarded with **Amazing Educator Award** by Universal Educators Organization on 10 December,2023 at Rajendra Public School, Sirsa

4. Honored with a certificate of appreciation by the Principal of Dayanand College, Hisar for outstanding contribution as a member of the IQAC and NAAC teams in helping the institution achieve an A++ grade in its accreditation dated 30 th July, 2024
5. Honored with a certificate of appreciation by the Haryana History Congress for exceptional volunteer service during the 9th Two-Days National Conference of the Haryana History Congress held in the Department of History, Dayanand College, Hisar, Haryana on November 16-17, 2024.