



Department of Computer Science & Engineering

Faculty of Engineering & Technology, IGU

Research

Patents

Application No.	Title	Applicant(s)/ Inventor(s)	Filing date	Application status	Published/Granted	Validity
1281/DEL/2011	AN IMPROVED METHOD OF DATA BROADCAST IN WIRELESS ENVIRONMENT	Dr. Savita Kumari & Others	02/05/2011	Granted	Granted/ 24/11/2020	02/05/2031 Link
202311002963	A SYSTEM FOR IMAGE DENOISING BASED ON DISCRETE WAVELET TRANSFORMATION WITH PRE-GAUSSIAN FILTERING	Dr. Satinder Bal Gupta & Others	14/01/2023	Published	Published/ 20/01/2023	Link
202311003017	A SYSTEM FOR FORECASTING CONTAMINATION OF FOOD WITH IOT AND AI THROUGH DATA MINING TECHNIQUES	Dr Reena Hooda & Others	15/01/2023	Published	Published/ 03/02/2023	Link
202211006186	DEEP COMPRESS VIDEO CODEC-VIDEO ANALYTICS FRIENDLY SMART VIDEO COMPRESSION SYSTEM	Dr. Sangeeta Yadav	04/02/2022	Granted	Granted/ 08/08/2023	Link

1. Books/Book Chapters

S.No.	Name of the teacher	Title of the book published	Title of chapters published	Year of publication	ISBN No.	Name of Publisher	Link of Document
57	Savita Kumari Sheoran, Suraj Ranga, Ghanapriya Singh	Emerging Smart Agricultural Practices Using Artificial Intelligence	Current Progress of Sustainable Smart Agriculture Using Internet of Things	2 june 2025	Print ISBN:9781394274246 Online ISBN:9781394274277	Wiley	Link
56	Dr. Naveen Kumar	MACHINE LEARNING FOR EVERYONE: A BEGINNER'S JOURNEY	(As EDITOR)	2025	978-93-49773-77-6	RG International Publication	Link
55	Mamta Rani, Dr. Satinder Bal Gupta, Reena Hooda	RESEARCH METHODS AND ADVANCE TECHNIQUES IN COMPUTER SCIENCE	Methods and Types of Research	2025	978-93-90115-72-3	Ms. Kavita Mithal Anu Books	Link
54	Rohit, Dr. M.S. Barak & Dr. Reena Hooda	Ethics, Values and Innovations in Education	The Role of Co-Curricular Activities in Inculcating Values among Students	2025	978-81-19840-06-9	ANSH BOOK INTERNATIONAL	Link

53	Dr. Reena Hooda & Dr. Shivani	Ethics, Values and Innovations in Education	Ethics of Technology in the Classroom	2025	978-81-19840-06-9	ANSH BOOK INTERNATIONAL	Link
52	Prof. Satindar Bal Gupta, Dr Shivani	Data and File Structures		2025	978-93-49003-93-4	Mahavir Publishing Company, Delhi	Link Online
51	Prof. Savita Kumari Sheoran, Vikesh Yadav	Applications and Principles of Quantum Computing	Quantum Computing Research: Ontological Study of the Quantum Computing Research Ecosystem	2024	979-8-3693-1168-4. ch012	IGI Global Scientific Publishing	Link
50	Reena Hooda and Shivani	Unnat Bharat Abhiyan to Viksit Bharat 2047: A Journey of Higher Education Since 2014	Recognition of Prior Learning (RPL) and Skill India as a booster for Unnat Bharat Abhiyan (UBA): A Review	2024	978-81-968923-6-4	Global Books Organisation	Link
49	Shivani, Reena Hooda	Unnat Bharat Abhiyan to Viksit Bharat 2047: A Journey of Higher Education Since 2014	Significance of Artificial Intelligence in Enhancing the Unnat Bharat Abhiyan Themes for Transforming Rural Areas	2024	978-81-968923-6-4	Global Books Organisation	Link

48	Shivani, Reena Hooda	Innovate, Educate, Elevate: NEP 2020 and the Future of Learning	The Evolution of Learning: A Deep Dive into Emerging Educational Technologies and their Impact	2024	978-81-19567-64-5	Eureka Publications	Link
47	Reena Hooda, Shivani	Innovate, Educate, Elevate: NEP 2020 and the Future of Learning	Transformative Artificial Intelligence (AI) in Targeting Women Education in Rural India and Enhancing their Social Inclusiveness	2024	978-81-19567-64-5	Eureka Publications	Link
46	Prof. Savita Kumari Sheoran	BLOCKCHAIN AND DIGITAL TWIN APPLICATIONS IN SMART AGRICULTURE	Digital Twin for the Agriculture Sector	2024	978-1003507390	CRC Press, Taylor & Francis Group	Link
45	Prof. Satinder Bal Gupta, Dr Shivani	Mathematical Foundations of Computer Science		2024	978-93-95783-70-5	Mahavir Publishing Company	Link Online
44	Prof. Satinder Bal Gupta, Dr Shivani		An Analysis of Growth of IOT Applications	2024	978-1-0364-1106-0	Cambridge Scholars Publishing	Link
43	Prof. Savita Kumari Sheoran	Electronic Governance with Emerging Technologies	Leaf Diseases Detection in Peach Using EfficientNet	2024	Print: 978-3-031-77028-9 Online: 978-3-031-77029-6	Springer, Cham	Link

42	Prof. Satinder Bal Gupta	Computer Fundamentals & Office Automation Tools		2024	978-93-95783-50-7	Mahavir Publishing Company	Link
41	Prof. Savita Kumari Sheoran	Applications and Principles of Quantum Computing	Quantum Computing Research: Ontological study of Quantum Computing Research Ecosystem	2024	9798369311684	IGI Global	Link
40	Dr. Reena Hooda, Dr Shivani	Emerging Paradigms in Marketing, 2024. Total pages 01-76.	Artificial Intelligence in Digital Marketing: A Paradigm Shift in Marketing Strategies	2024	978-81-19674-29-9	National Press Associates, New Delhi	LINK
39	Dr. Reena Hooda, Dr Shivani	Emerging Paradigms in Marketing, 2024. Total pages 01-76.	Competences, Challenges and Issues in Internet Marketing	2024	978-81-19674-29-9	National Press Associates, New Delhi	LINK
38	Dr. Reena Hooda, Dr Shivani	Research and Reviews in Literature, Social Sciences, Education, Commerce and Management Volume II, 2024. Total pages 01-126.	Engineering Intelligence: A Systematic Approach to the Machine Learning Lifecycle	2024	978-93-95847-80-3	Bhumi Publishing, Nigave Khalasa, Tal – Karveer, Dist – Kolhapur, Maharashtra, India 416 207	LINK
37	Dr. Reena Hooda, Dr Shivani	Research and Reviews in Literature, Social Sciences, Education, Commerce and Management Volume II, 2024. Total pages 01-126.	Role of Support Vector Machine Learning Algorithm and its Working	2024	978-93-95847-80-3	Bhumi Publishing, Nigave Khalasa, Tal – Karveer, Dist – Kolhapur, Maharashtra, India 416 207	LINK

36	Dr. Reena Hooda, Dr Shivani	Advancement in Engineering Exploring Frontiers in Biomechanics, Nanotechnology and Energy Systems, 2024. Total pages 01-128.	AI-Enhanced Automation: A Cross-Domain Exploration of Robotic Applications	2024	978-81-970323-1-8	SAAR Publications, A-09, Sita Ram Colony, Balkeshwar, Agra, Uttar Pradesh – 282004	LINK
35	Dr. Reena Hooda, Dr Shivani	Advancement in Engineering Exploring Frontiers in Biomechanics, Nanotechnology and Energy Systems, 2024. Total pages 01-128.	Significance of Machine Learning in Robotics for Shaping the Future and Human Welfare	2024	978-81-970323-1-8	SAAR Publication, A-09, Sita Ram Colony, Balkeshwar, Agra, Uttar Pradesh – 282004	LINK
34	Dr. Reena Hooda, Dr Shivani	Modern India (Education, Environment & Society), 2024. Total pages 01-389	A Novel Approach to the Research, Academic Writing and Education Using Artificial Intelligence and Machine Learning Tools	2024	978-81-970308-9-5	Kunal Books, 4648/21, Ist Floor Ansari Road, Daryaganj, New Delhi-110002.	LINK
33	Dr. Reena Hooda, Dr Shivani	Modern India (Education, Environment & Society), 2024. Total pages 01-389	Neural Network Based Hand Gesture Recognition System	2024	978-81-970308-9-5	Kunal Books, 4648/21, Ist Floor Ansari Road, Daryaganj, New Delhi-110002	LINK

32	Dr. Reena Hooda, Dr Shivani	Contemporary Issues and Challenges in Business & Economic Growth, 2024. Total pages 01-130.	Issues and Challenges of Internet of Things in Economic Growth	2024	978-3-96492-536-7	Weser Books, No. 79737, Aussere Weberstr, 57 02763, Zittau, Germany.	LINK
31	Dr. Reena Hooda, Dr Shivani	Contemporary Issues and Challenges in Business & Economic Growth, 2024. Total pages 01-130.	Issues And Challenges of Artificial Intelligence and Machine Learning in the Socio-Economic Growth of a Country Like India	2024	978-3-96492-536-7	Weser Books, No. 79737, Aussere Weberstr, 57 02763, Zittau, Germany.	LINK
30	Dr. Reena Hooda, Dr Shivani	Digital Economy of India: Recent Developments and Emerging Perspectives, 2024. Total pages 01-138	Revolutionizing Learning: The Significance of Artificial Intelligence in Education and Its Impact on Learners and Educators	2024	978-81-19674-52-7	National Press Associates, C-24, Ground Floor, Panchsheel Vihar, Malviya Nagar, New Delhi-110017, India	LINK
29	Dr. Reena Hooda, Dr Shivani	Digital Economy of India: Recent Developments and Emerging Perspectives. 2024. Total pages 01-138	Credit Card Fraud Detection using Machine Learning and Grasshopper Optimization	2024	978-81-19674-52-7	National Press Associates, C-24, Ground Floor, Panchsheel Vihar, Malviya Nagar, New Delhi-110017, India	LINK
28	Dr. Reena Hooda, Dr Shivani	Digital Learning: Trends and Challenges in Education, 2024. Total pages 01-237	Study of the Latest Emerging Technological Trends in Education	2024	978-81-19567-31-7	Eureka Publications, 604, The Poorva, Pimple Saudagar, Pune, Maharashtra-411027.	LINK

27	Dr. Reena Hooda, Dr Shivani	Digital Learning: Trends and Challenges in Education, 2024. Total pages 01-237	Study of the Growing Role of Augmented Reality in Education	2024	978-81-19567-31-7	Eureka Publications, 604, The Poorva, Pimple Saudagar, Pune, Maharashtra-411027.	LINK
26	Dr. Reena Hooda	Future Computing Technologies for Sustainable Development (Ncfctsd-24)- Proceedings of National Conference	Navigating the Digital Domain: Design and Development of Websites	2024	978-93-80544-57-1	CSE & CRSISEC, MDU Rohtak	
25	Prof. Satinder Bal Gupta, Dr. Reena Hooda	Future Computing Technologies for Sustainable Development (Ncfctsd-24)- Proceedings of National Conference	How significance of Artificial Intelligence to support The NEP implements in institutions	2024	978-93-80544-57-1	CSE & CRSISEC, MDU Rohtak	
24	Prof. Savita Kumari Sheoran	Computational Intelligence for Sustainable Development (pp.14)	Research Hotspots in Quantum Error Correction using Artificial Intelligence Techniques	2023	979-8-88697-198-9	Nova Science Publishers	Link
23	Dr. Shivani	Advances in Computer Science, 19, (2023)	Big Data Analytics and its Benefits, pp. 113-126	2023	978-93-5570-934-9	Akinik Publications	LINK
22	Prof. Savita Kumari Sheoran	Computational Intelligence for Sustainable Development	Chapter -12 Research Hotspots in Quantum Error Correction Using Artificial Intelligence Techniques	2022-2023	979-8-88697-198-9	Nova Science Publishers, Inc., USA	Link

21	Prof. Savita Kumari Sheoran	Decision Analytics Applications in Industry	Chapter -23 Autoregressive Model for Multivariate Crime Prediction	2019-2020	978-981-15-3643-4 23	Springer, Singapore	Link
20	Dr. Satinder Bal Gupta , Sushil Kumar Jain	Ecommerce		2022-2023	978-93-95783-21-7	Mahavir Publishing company	Link
19	Dr. Satinder Bal Gupta, Dr. Manish Goyal	Engineering Mathematics		2020-2021	978-93-5274-554-8	University Science Press	Link
18	Reena Hooda	Chapter in Rural Development in Contemporary India, S.K Singh, et.al. Eds.	How gender-sensitive is the rural employment guarantee programme? A review of selected studies in India. Alka, Vikas Batra & Reena Hooda (2022).	2022-2023	978-93-92108-07-5	Rudra Publications and Distributors, New Delhi, pp 228-237.	Link
17	Reena Hooda	Chapter in Rural Development in Contemporary India, S.K Singh, et.al. Eds.	Digital initiatives in Indian agriculture by government and private sector: An analysis.Avinash, Vikas Batra & Reena Hooda (2022).	2022-2023	978-93-92108-07-5	Rudra Publications and Distributors, New Delhi, pp 228-237.	Link

16	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research. Vol 5. 2021, pp. 01-12. Total Pages 01-99.	IOT Applications and Role of Fog Computing in Distributed Computing.	2021-2022	978-1-913482-65-7	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
15	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research. Vol 5. 2021, pp. 13-24. Total Pages 01-99.	Django Framework for Web Development.	2021-2022	978-1-913482-65-7	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
14	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research. Vol. 5. 2021, pp. 25-38. Total Pages 01-99.	Working with Data Frames in R.	2021-2022	978-1-913482-65-7	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
13	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research". Vol. 6, 2021, pp. 01-13. Total Pages 01-65.	Data Analysis in R: Working on Data Sets.	2021-2022	978-1-913482-57-2	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link

12	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research”. Vol. 6, 2021, pp. 15-28. Total Pages 01-65.	Filtering the Covid-19 Data of India in R Studio.	2021-2022	978-1-913482-57-2	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
11	Reena Hooda	Chapter in Current Trends in Multidisciplinary Research”. Vol. 6, 2021, pp. 29-42. Total Pages 01-65.	Data Mutations and Plotting in R.	2021-2022	978-1-913482-57-2	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
10	Reena Hooda	Impact of COVID-19 on Indian Society: Challenges & Opportunities. First Edition		2021-2022	978-93-85756-99-6	Balaji Publications Meerut	Link
9	Reena Hooda	Chapter in Role of Women in Changing the Society: 21st Century Challenges, Rimjim Borah Ed,	Women Labour in Informal Sector and COVID-19 in India: Perspectives from Various Studies and Policy Alternatives.Batra, Vikas and Reena Hooda (2022).	2021-2022	978-81-955557-5-8	SCIENG Publications, pp	Link
8	Reena Hooda	Chapter in Role of Women in Changing the Society: 21st Century Challenges, Rimjim Borah Ed,	Information Technology and Working Women: Emerging Patterns and Prospects in India.Hooda, Reena and Vikas Batra (2022).	2021-2022	978-81-955557-5-8	SCIENG Publications, pp	Link

7	Reena Hooda	Covid-19 Pandemic: Applications of Video Tutorials for Blended Learning.	Chapter in Impact of COVID-19 on Indian Society: Challenges & Opportunities. First Edition: 2020, pp. 19-25, Total Pages 01-279.	2020-2021	978-93-85756-99-6	Balaji Publications Meerut-250001, First Edition : 2020.	Link
6	Reena Hooda	Chapter in Current Trends in Multidisciplinary. 2020, Vol. 3. pp. 73-87. Total Pages 01-115.	Chapter – 5 Python: A Language for All.	2020-2021	978-1-913482-76-3	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
5	Reena Hooda	Chapter in Current Trends in Multidisciplinary.2020, Vol. 3. pp. 89-101. Total Pages 01-115.	Chapter - 6 Types, Inputs and Outputs in Python.	2020-2021	978-1-913482-76-3	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
4	Reena Hooda	Chapter in Current Trends in Multidisciplinary. 2020, pp. 103-115. Vol. 3.Total Pages 01-115.	Chapter - 7 Working with Strings in Python and String Operations.	2020-2021	978-1-913482-76-3	Rubicon Publications 4/4A Bloomsbury Square, Bloomsbury Square, London, WC1A 2RP, England	Link
3	Reena Hooda	Chapter in New Paradigm in Business & Education. 2020, pp. 153-159. Total Pages 01-258.	Data Science and R for Analytics.	2020-2021	978-81-944303-8-4	National Press Associates, New Delhi.	Link

2	Reena Hooda(Sole author)	Understanding Data Analytics, Data Science, Big Data & Data Analysis.	Chapter in Advances in Computer Science"-Vol. 4. 2019 pp. 97-108.Total Pages 01-139.	2019-2020	978-93-5335-488-6	AkiNik Publications New Delhi, 2019.	Link
1	Reena Hooda	Foundations of Database and Mapping to Data Warehouse.	Chapter in Research Trends in Multidisciplinary Research. Vol 4. 2019. pp. 153-167, Total Pages 01-209.	2019-2020	978-93-5335-516-6	AkiNik Publications New Delhi, 2019.	Link

3. MoUs

Year of signing MoU	Name of the organization with whom MOU/Collaboration being signed	Duration	Purpose of MOU/Collaboration	List the actual activities under each MOU year-wise	Date of the activity conducted
2023	Infosys Limited	5 Years	Placement & Over all development of Students		Link

4. Research Papers

S.No.	Title of Paper	Author(s)	Journal, Volume, Page (Year)	ISSN Number(s)	Journal Web Link	Abstract Link	SCI/SCOPUS/UGC Care
40.	Robust evaluation of classical and quantum machine learning under	Savita Kumari Sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	<i>Sci Rep</i> 15 , 45714 (2025).	2045-2322	Link	Link	SCI

	noise, imbalance, feature reduction and explainability						
39.	A hybrid QSVM-QNN approach for breast cancer diagnosis using quantum feature maps	Vikesh Yadav, Savita Kumari Sheoran and Rakesh Kumar Sheoran	PeerJ Comput. Sci., 12:e3600 (2026)	2376-5992	Link	Link	SCI
38.	Vector Search in LLMs: Experimental Evaluation with MongoDB Atlas	Savita kumari sheoran, Deepak	Journal of Cyber Security & Information Management, 17(2), 146-166, 2026.	2690-6775	Link	Link	Scopus
37.	A Comprehensive Analysis of Recognition of Hand Gestures Using Machine Learning	Shivani and Satinder Bal Gupta	Makara Journal of Technology, Indonesia, 29(1), 48-60, 2025.	E-ISSN: 2356-4539, ISSN: 2355-2786	Link	Link	SCI
36.	A systematic Comprehensive Review of Artificial Intelligence Powered Text-based Applications for Mental Healthcare	Shivani and Satinder Bal Gupta, Monika Gupta	Journal of Artificial Intelligence For Medical Sciences, 6(1-4), 01-11, 2025	2666-1470	Link	Link	Peer Reviewed
35.	Image Security Analysis by MSE, PSNR, CC, NPCR, UACI Parameters Using ECC and Wavelet Transform	Himanshu, Reena Hooda and Vikas Poply	INDIAN JOURNAL OF TECHNICAL EDUCATION, 47(3), 73-80, 2024	0971-3034	Link	Link	UGC CARE
34.	A Systematic and Comprehensive Analysis for Recommendation of Proposed IoT-Enabled Smart Indoor Hydroponic System Model in Smart Cities	Dr. Reena Hooda, Dr. Sujit Kumar Singh, Dr. Nitin Bansal, Ms. Shivani Gupta, Ms. Prachi Raval, Chandan Kumar Singh	International Journal of Basic and Applied Sciences (IJBAS), 14(5), 503-515, 2025.	2227-5053	Link	Link	Scopus
33.	Topological Quantum Error Correction with Semions	S. Verma, S. K. Sheoran and R. K. Sheoran	International Journal of Physics and Mathematics, 6(2), 44-47, 2024.	2664-8644	Link	Link	UGC CARE

32	Fidelity and Accuracy Trade-off in Quantum Kernels	S. Verma, S. K. Sheoran and R. K. Sheoran	International Journal of Physics and Applications, 6(2), 186-191, 2024	2664-7583	Link	Link	UGC CARE
31	Image Security Analysis by MSE,PSNR,CC,NPCR,UACI Parameters Using ECC and Wavelet Transform	Dr. Reena Hooda, Vikas Popli,Himanshu	The Indian Journal of Technical Education,July 2024	0971-3034	Link	Link	
30	तकनीकी और साहित्य का अनूठा संगम	Reena Hooda, Ajay Kumar, Shivani	बहुरि नहिं आवना, Issue 26, Part 2, 344-346, March 2024	2320-7604		Link	UGC CARE
29	Software implementation of systematic polar encoding based PKC-SPE cryptosystem for quantum cybersecurity	Reena Hooda, Shivani	Scientific Reports, Nature, 14, 9994, May 2024	2045-2322	Link	Link	WoS
28	A systematic comparative study of popular biomimetic intelligence techniques	Shivani, Satinder Bal Gupta	Sigma J Eng Nat Sci, 42(2), June 2024	1304-7205	Link	Link	WoS, Scopus
27	Importance of Artificial Intelligence in Achieving SDGs in India	Shivani, Satinder Bal Gupta	International Journal of Built Environment and Sustainability, 11(2), 1-26, May 2024	1511-1369 / 2289-8948	Link	Link	WoS
26	A Systematic Analysis of AI-empowered Educational Tools Developed in India for Disabled People	Shivani, Satinder Bal Gupta	Information Technologies and Learning Tools, 100(2):199-216 April 2024	2076-8184	Link	Link	WoS
25	Analysis of AI-enhanced educational tools developed in India for linguistic minorities and disabled people	Shivani, Satinder Bal Gupta	Life Span and Disability XXVI, 2, 221-243, Dec 2023	2035-5963	Link	Link	Scopus, WoS
24	Industrial Internet of Things: An Analysis of Emergence, Component and Challenges	R Hooda , A Kumar , Shivani ,Sudhir, Pooja, P Yadav	IJRITCC,Volume: 11 Issue: 10,2010-2017, 2023	2321-8169	Link	Link	SCOPUS

23	Enhanced Spam Detection System for Twitter Social Networking Platform	P.Yadav, A.Kumar, Sudhir, Shivani, R.Hooda	IJRITCC, Volume: 11 Issue: 11s, 195-201, 2023	2321-8169	Link	Link	SCOPUS
22	Geowebcln: An Intensive Cleaning Architecture for Geospatial Metadata	Savita Kumari Sheoran and Vinti Parmar	Quaestiones Geographicae, 41, 51-62 (2022)	2081-6383	Link	Link	Scopus
21	Identification of Alternative Landfill Site Selection using QGIS in Densely Populated Metropolitan Area, Quaestiones Geographicae	Sheoran, S.K., and Parmar	Quaestiones Geographicae, 39(3), 47-56, 2020	0137-477 X	Link	Link	Scopus
20	Visual Analysis of Spatial Metadata.	Sheoran, S.K., and Parmar,	International Journal of Computer Theory and Engineering (IJCTE), 12(4), 102-105, 2020	1793-8201	Link	Link	SCOPUS
19	CONTEXT-BASED SPATIAL METADATA CLEANING USING QGIS	V. Parmar and S. Sheoran	Vidyabharati International Interdisciplinary Research Journal, 12(1), 55-62, 2020	2319-4979	Link	Link	UGC CARE
18	An Extended Work Architecture for Online Threat Prediction in Tweeter Dataset	Savita Kumari Sheoran, Partibha Yadav	International Journal of Computer Science & Network Security, 21(1), 97-106, 2020	1738-7906	Link	Link	ESCI
17	Machine Learning based Optimization Scheme for Detection of Spam and Malware Propagation in Twitter	Savita Kumari Sheoran, Partibha Yadav	International Journal of Advanced Computer Science and Applications, 12(2), 495-503, 2020	2156-5570	Link	Link	SCOPUS
16	A Hybrid Image Denoising Method Based on Discrete Wavelet Transformation with Pre-Gaussian Filtering	Nitin, Satinder Bal Gupta	Indian Journal of Science and Technology, 2317-2324, 2022	0974-6846	Link	Link	WoS

15	Analysis of some popular AI and ML algorithms used in agriculture	Shivani, Satinder Bal Gupta, Raj Kumar Yadav, Reena Hooda, Sunita Dhingra and Monika Gupta	International Conference on Computational Modelling, Simulation and Optimization (ICCMO), Pathum Thani, Thailand, IEEE Xplore,28-33,2023		Link	Link	
14	Developing Precision Agriculture using Data Augmentation Framework for Automatic Identification of Castor Insect Pests	Nitin, Satinder Bal Gupta, Rajkumar Yadav, Fatemeh Bovand, Pankaj Kumar Tyagi	Frontiers in Plant Science,1-14,2023	1664-462X	Link	Link	Scopus
13	Analysis of Popular Techniques Used in Educational Data Mining	Satinder Bal Gupta, Raj Kumar Yadav, Shivani Gupta	International Journal of Next-Generation Computing,11(2),137-162, 2020	0976-5034	Link	Link	UGC Care
12	Different Phase Retrieval Algorithms: A Review	Himanshu, Satinder Bal Gupta, Raj Kumar Yadav, Vikas Popli	International Journal of Future Generation Communication and Networking, 13(4), 1978-1989, 2020	2233-7857	Link	Link	Peer Reviewed
11	A Systematic Comparative Analysis of Clustering Techniques	Satinder Bal Gupta, Raj Kumar Yadav, Shivani Gupta	Applied Computer Systems,25(2),87-104,2020	2255-8691	Link	Link	WOS
10	Tools of ICT for Learning and Teaching Mathematics	Madhu Aggarwal, Satinder Bal Gupta	Journal of Mechanics of Continua and Mathematical Sciences,15(4),1-12,2020	2554-7190	Link	Link	WoS SCI
09	Technology and E-Learning in Higher Education	Satinder Bal Gupta, Monika Gupta	International Journal of Advanced Science and Technology,29(4),1320-1325, 2020	2005-4238	Link	Link	SCOPUS
08	Study of Growing Popularity of Payment Apps in India	Satinder Bal Gupta, Raj Kumar Yadav, Shivani	Test Engineering & Management,82,16110-16119, 2020	0193-4120	Link	Link	SCOPUS

07	To Design & Implement the Image Encryption Algorithm, using Phase Retrieval in Elliptic Curve Cryptography (ECC)	Reena Hooda, Himanshu, Vikas Poply	5th International Conference on Contemporary Computing and Informatics (IC3I), Uttar Pradesh, India, IEEE Xplore, 160-164, 2023	1004-9037	Link	Link	SCOPUS
06	Havocs of Wheat Allergy on Sports Performance in Haryana and Application of Apriori Association Rule Mining to Detect Hidden Relationships between Various Factors of Allergies.	Reena Hooda	International journal of scientific & technology research, 8(11), 2241-2244, 2019	2277-8616	Link	Link	SCOPUS
05	Information Technology Miseries: Cyber Molestations against Women & Children.	Reena Hooda	International journal of scientific & technology research, 8(9), 2259-2261, 2019	2277-8616	Link	Link	SCOPUS
04	Applying Bayes' Classification to Predict Conditional Probabilities of a Test Case for Specified Injuries in Biomechanical Judo Combating.	Reena Hooda, Deepak Dhaka	International Journal of Recent Technology and Engineering, 8(2), 3301-3307, 2019	2277-3878	Link	Link	SCOPUS
03	Bioinformatics as an Emerging Field of Data Science	Reena Hooda	International journal of scientific & technology research, 8(8), 375-377, 2019	2277-8616	Link	Link	SCOPUS
02	Implementing Biomechanics to Study Motions of Judokas through Kinovea Software for Enhancing their Performance & Maintaining Center of Gravity During Throwing Techniques.	Deepak Dhaka and Reena Hooda	International Journal of Engineering and Advanced Technology, 8(05), 1607-1613, 2019	2249-8958	Link	Link	SCOPUS
01	Open Source Availability and Impact on Learning in Outreach Areas.	Reena Hooda	International Journal of Engineering and Advanced Technology, 2019	2249-8958	Link		SCOPUS

5. Proceedings

S.No	Title of Paper	Author(s)	Conference Details	Conference Web Link	Abstract Link
1	Exploring Quantum Neural Networks: A Multi-Platform Study on Quantum-Based Classification	Savita Kumari Sheoran; Vikesh Yadav; Rakesh Kumar Sheoran	2025 International Conference on Networks and Cryptology (NETCRYPT)	Link	Link
2	Analysis of Quantum SVM and KNN on Azure Quantum	Savita Kumari Sheoran; Vikesh Yadav; Rakesh Kumar Sheoran	2025 5th International Conference on Pervasive Computing and Social Networking (ICPCSN)	Link	Link
3	Enhancing Data Classification with Hybrid QNNs and Quantum Feature Maps in Google Cirq	Savita Kumari Sheoran; Vikesh Yadav; Rakesh Kumar Sheoran	2025 Seventh International Conference on Computational Intelligence and Communication Technologies (CCICT)	Link	Link
4	Synthetic Realities: A Critical Review of Deepfake Techniques	Megha Yadav, Savita Kumari Sheoran, Ghanapriya Singh	International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics (IC3ECSBHI) IEEE pp. 1094-1098 (2025) Greater Noida, India	Link	Link
5	EfficientNetB4 to EfficientNetB7 for Pepper Bell Plant Leaf Disease Detection: A Comparative Study	Suraj Ranga, Savita Kumari Sheoran, Ghanapriya Singh, Megha Yadav	International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics (IC3ECSBHI) IEEE , pp. 384-388 (2025) / 16-01-2025, Greater Noida, India	Link	Link

6	Detecting Leaf Disease and Classifying Images via Transfer Learning with VGG 16	Savita Kumari Sheoran, Ritika	IEEE 3rd International Conference on Disruptive Technologies (ICDT-2025) Technically Co-Sponsored by IEEE UP Section (INDIA) March 07-08,2025	Link	Link
7	Artificial Intelligence Incorporation in Weed Management: AI-Driven Solutions	Savita Kumari Sheoran, Ritika	International Conference on Recent Trends & Innovations in Mathematics, Statistics and Scientific Computing (IC-RTIMSSC-2025) pp 114 , March 05-06, 2025	Link	Link
8	The role of Deep Learning in Attaining the Sustainable Development Goals	Nitu Yadav, Savita kumari Sheoran	IEEE Xplore, 2024 First International Conference on Technological Innovations and Advance Computing (TIACOMP), Bali, Indonesia, pp. 437-443, 2024.		Link
9	Comparative Analysis of Classification Efficiency of Quantum Machine Learning Algorithms	S. K. Sheoran and V. Yadav	IEEE Xplore, 2024 IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT), Greater Noida, India, pp. 1818-1823, 2024.		Link
10	Artificial Intelligence Incorporation in Weed Management: AI-Driven Solutions	Savita Kumari Sheoran, Ritika	Recent Trends & Innovations in Mathematics, Statistics and Scientific Computing (IC-RTIMSSC-2025)		Link
11	Detecting Leaf Disease and Classifying Images via Transfer Learning with VGG 16	Savita Kumari Sheoran, Ritika	3rd International Conference on Disruptive Technologies (ICDT-2025), IEEE UP Section (INDIA), 07-08 March 2025		Link
12	A Deep Hybrid Model CNN-SVM for DeepFake Image Identification	Savita Kumari Sheoran, Nitu Yadav	International Conference On Recent Trends & Innovations in Mathematics, Statistics and Scientific Computing (IC-RTIMSSC-2025)		Link
13	Deep Fake Detection using Hybrid CNN and Machine Learning Techniques	Savita Kumari Sheoran, Nitu Yadav	3rd International Conference on Networks and cryptology (NETCRYPT), IEEE Indexed in Scopus, 29-31 May 2025		Link
14	The Role of Deep Learning in Attaining the Sustainable Development Goals	Savita Kumari Sheoran, Nitu Yadav	1 st International Conference on Technological Innovations and Advanced Computing (TIACOMP), 29-30 June 2024		Link

			IEEE Indexed in Scopus		
15	Hybrid Evolutionary Bayesian Optimization for Cloud Database Knob Tuning	Savita Kumari Sheoran, Deepak	IEEE Conference, 2025. Indexed in Scopus. Status: Accepted		Link
16	Analysis of Quantum SVM and KNN on Azure Quantum	Savita kumari sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	IEEE Conference, 2025, Indexed in Scopus, 14-16 May 2025		Link
17	Enhancing Data Classification with Hybrid QNNs and Quantum Feature Maps in Google Cirq	Savita kumari sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	IEEE Conference, 2025, Indexed in Scopus, 11-12 April 2025		Link
18	Exploring Quantum Neural Networks: A Multi-Platform Study on Quantum-Based Classification	Savita kumari sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	IEEE Conference, 2025, Indexed in Scopus, 29-31 May 2025		Link
19	Quantum k-Nearest Neighbour Classifier: Investigating Hybrid Feature map approach in Quantum Machine Learning utilizing PennyLane	Savita kumari sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	IEEE Conference, 2025, Indexed in Scopus, 13-14 June 2025		Link
20	Quantum Computing for Sustainable Energy: Optimising SDG-7 Through Smart Energy Management and Financial Planning	Savita Kumari Sheoran, Vikesh Yadav, Rakesh Kumar Sheoran	2025 International Conference on Modern Sustainable Systems (CMSS)	Link	Link