



Dr. Pankaj Chandra
Designation - Assistant Professor
Department – Information Technology
School – School of Studies – Engineering & Technology
University - Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh
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Qualifications –

Degree	University/College /Board	Specialization /Discipline	Year of passing	CGPA/ Percentage
Ph.D	GGV Bilaspur	Wireless Sensor Network	2025	---
M.Tech.	IIT Kharagpur	I.T.	2010	7.82 (CGPA)
B.E.	Pt. R.S.S.U Raipur	I.T.	2006	70.92 %

Area of Interest/Specialization – Wireless Sensor Networks

Academic Distinctions

- Qualified in GATE 2008 with A.I.R. 32
- Qualified in GATE 2007 with A.I.R. 1257
- Qualified in GATE 2006 with A.I.R. 957
- Qualified in GATE 2012

Experience–

- Assistant Professor in the department of Information Technology at School of Studies – Engineering and Technology, Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh since 02-04-2012 to Till Date.
- Assistant Professor(Ad-hoc) in the department of Information Technology at Institute of Technology, Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh since 09-08-2011 to 01-04-2012.
- Assistant Professor(Ad-hoc) in the department of Information Technology at Institute of Technology, Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, Chhattisgarh about one year from 10-07-2010 to 16-06-2011.
- Worked on a Project ”Tier-based energy efficient CH selection method for WSN” from May 2009 to April 2010 under guidance of Dr. Sudip Misra, Professor, School of Information Technology, IIT Kharagpur.

Publication

[1] Pankaj Chandra, “Content Based Image Retrieval in Multimedia Database”, International Journal of Technical Innovation in Modern Engineering & Science, Volume 4, Issue 3, 2018, ISSN 2455-2585 [UGC Approved]

[2] Pankaj Chandra, Santosh Soni, “Effect of Various Networks Security Attacks on WSN Based upon Residual Energy”, International Journal of Technical Innovation in Modern Engineering & Science, Volume 4, Issue 5, 2018, ISSN 2455-2585 [UGC Approved]

- [3] Pankaj Chandra, Santosh Soni, "Performance Analysis of AODV, DSDV and DSR MANET Routing Protocols using NS-2", International Journal of Research and Analytical Reviews, Volume 5, Issue 3, 2018, ISSN 2348-1269 [UGC Approved]
- [4] Pankaj Chandra, "A Review Paper on Mobile Sink in Wireless Sensor Network", International Journal of Technical Innovation in Modern Engineering & Science, Volume 4, Issue 6, 2018, ISSN 2455-2585 [UGC Approved]
- [5] Pankaj Chandra, Santosh Soni, Mukul Gupta, "Sentiment and Gender classification using countenance", International Journal of Research and Analytical Reviews, Volume 5, Issue 4, 2018, ISSN 2348-1269 [UGC Approved]
- [6] Pankaj Chandra, Santosh Soni, "Study of RSA Algorithm for Data Encryption and Decryption", International Journal of Research and Analytical Reviews, Volume 5, Issue 4, 2018, ISSN 2348-1269 [UGC Approved]
- [7] Pankaj Chandra, Santosh Soni, Akanksha Gupta, "Design and analysis of crop recommended system using AI techniques", Chhattisgarh Journal of Science and Technology(CJST), Volume 18, Issue 1, 2021, ISSN 0973-7219 [Peer Reviewed]
- [8] Pankaj Chandra, Santosh Soni, Akanksha Gupta, "Smart Traffic analysis and accident management using cupcarbon", Chhattisgarh Journal of Science and Technology(CJST), Volume 18, Issue 1, 2021, ISSN 0973-7219 [Peer Reviewed]
- [9] Agnivesh Pandey, Pankaj Chandra, Rajesh Mahule, Soma Das, Sumit Gupta, Ganesh prasad Shukla, "Web testing and security audit of web application", Chhattisgarh Journal of Science and Technology(CJST), Volume 18, Issue 2, 2021, ISSN 0973-7219 [Peer Reviewed]
- [10] Agnivesh Pandey, Pankaj Chandra, Santosh Soni, Rohit Raja, Soma Das, Sumit Gupta, "An effective method for detecting crop disease using artificial neural network and image processing", Chhattisgarh Journal of Science and Technology(CJST), Volume 18, Issue 2, 2021, ISSN 0973-7219 [Peer Reviewed]
- [11] Santosh Soni, Pankaj Chandra, Akanksha Gupta, "Design and analysis of a new vehicle number plate recognition system, Chhattisgarh Journal of Science and Technology(CJST), Volume 18, Issue 1, 2021, ISSN 0973-7219 [Peer Reviewed]
- [12] Dharmendra Kaushik, Alok Kumar Singh Kushwaha, Shrawan Kumar Patel, Pankaj Chandra, "Presentation Attack Detection and Person Recognition Methods using Iris Image", Chhattisgarh Journal of Science and Technology(CJST), Volume 19, Issue 2, 2022, ISSN 0973-7219 [Peer Reviewed]
- [13] Pankaj Chandra, Dr. Santosh Soni, "Performance Variations of AODV, DSDV and DSR Protocols in MANET under CBR Traffic using NS-2.35", International Journal of Computer Science and Network Security, Volume 22, Issue 7, 2022, ISSN 1738-7906. [Peer Reviewed]
- [14] Vaibhav Kant Singh, Santosh Kumar Soni, Dr. Nageshwar Dev Yadav, Pankaj Chandra, "A System for News Classification in Regional Language using Python", Shodh Prabha, Volume No.27, Issue 4, 2022, ISSN 0974-8946. [UGC CARE]
- [15] Vaibhav Kant Singh, Santosh Kumar Soni, Dr. Nageshwar Dev Yadav, Pankaj Chandra, "A System for Cartoonifying an Image using Python", SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, Volume No.14, Issue 5, 2022, ISSN 2229-7111. [UGC CARE]
- [16] Devendra Kumar Singh, Santosh Soni, Pankaj Chandra, Prakash Chandra Sharma, Satish Negi, Sudha Mishra, "Hybrid Intrusion Detection System using Extreme Learning Machine based on GA & PSO", Computer Integrated Manufacturing Systems, 28(12), 2022, ISSN-1292-1315. [Scopus Indexed]

- [17]Kadambari Raghuram, Ibrahim Altarawni, Vijayalakshmi K, Ajay Kumar, Abhijeet sinh Jadeja, Pankaj Chandra, (2023, May). “An Integration Of Wireless Communications And Artificial Intelligence For Autonomous Vehicles”, In 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) (pp. 2713-2717). [Scopus Indexed IEEE Conference]
- [18] Pankaj Chandra, Santosh Soni, “Analysis of mobile sink techniques in wireless sensor networks: A review”, Journal of Data Acquisition and Processing, Volume No.38, Issue 2, 2023, ISSN 1004-9037. [Scopus Indexed]
- [19]Shakir Khan, Kundurthi Bharadwaja, Agnivesh Pandey, Pankaj Chandra, Dr. Santosh Soni, Mohit Tiwari, “Detailed Investigation of Influence of Machine Learning and Big Data on Digital Transformation in Marketing”, BioGecko - A Journal for New Zealand Herpetology, Volume 12, Issue 1, 2023, ISSN 2230-5807. [Peer Reviewed]
- [20]Santosh Soni, Pankaj Chandra, Akanksha Gupta, Deepak Kant Netam, Sushant Kumar, Kaushik Tiwary, “Design and implementation of inventory management system for university”, European Chemical Bulletin, Volume No. 12, Special Issue 4, 2023, ISSN 2063-5346. [Scopus Indexed]
- [21]Akanksha Gupta, Santosh Soni, Pankaj Chandra, “Efficient Data Delivery Model for Wireless Sensor Network”, Journal of Survey in Fisheries Sciences, Volume No. 10, Special Issue 2, 2023, ISSN 2368-7487. [Scopus Indexed]
- [22] Yogendra Narayan, Dr.R.RAMAN, Mr. Anuj Kumar Sharma, Dr. Santosh Soni, Pankaj Chandra, Akanksha Gupta, “Design and Implementation of A Smart Traffic Management System Using Internet of Things (IoT) Technology”, European Chemical Bulletin, Volume No. 12, Special Issue 5, 2023, ISSN 2063-5346. [Scopus Indexed]
- [23]Jyoti Tiwari, Dr. Santosh Soni, Pankaj Chandra, “Improved Load Balancing Protocol for WSN”, Journal of Data Acquisition and Processing, Volume No.38, Issue 3, 2023, ISSN 1004-9037. [Peer Reviewed]
- [24]Dr. Sudha Mishra, Dr. Meesala Sudhir Kumar, Pankaj Chandra, Dr. Santosh Soni, Dr. Devendra Kumar Singh, Akanksha Gupta, Bindu Tiger, “Tumor Detection and Comparative Analysis”, European Chemical Bulletin, Volume No. 12, Special Issue 13, 2023, ISSN 2063-5346. [Scopus Indexed]
- [25]Pankaj Chandra, Santosh Soni, Akanksha Gupta, Prayas Kumar, Kunal Raj, “Threat prevention & vulnerability analysis of smart contracts in blockchain networks”, suranaree journal of science and technology, Volume No. 30, Issue 5, 2023, ISSN 0858-849X. [Scopus Indexed]
- [26]Santosh Soni, Pankaj Chandra, Devendra Kumar Singh, Prakash Chandra Sharma, Dinesh Saini, “A new mobile data collection and mobile charging (MDCMC) algorithm based on reinforcement learning in rechargeable wireless sensor network”, journal of intelligent & Fuzzy Systems, Volume No. 45, Issue 4, 2023, ISSN 1064-1246. [Scopus Indexed]
- [27] Santosh Soni, Pankaj Chandra, Prakash Chandra Sharma, Jayesh Gangrade, Devendra Kumar Singh, Medical kit delivery using Drone: Critical medical infrastructure solution for emergency medical situation, International Journal of Disaster Risk Reduction, Volume 108, 2024, 104502, ISSN 2212-4209. [SCI]
- [28] Pankaj Chandra, Santosh Soni, “A New Approach to wireless charging and on-demand data gathering (SSWCODDG) for RWSN”, suranaree journal of science and technology, Volume No. 31, Issue 2, 2024, ISSN 0858-849X. [Scopus Indexed]

- [29] Chandra, P., Soni, S. A New Joint Data Collection and Wireless Energy Transfer (SSDCWC) Strategy for Rechargeable Wireless Sensor Network. *SN COMPUT. SCI.* **5**, 657 (2024). <https://doi.org/10.1007/s42979-024-03000-2>. [Scopus Indexed]
- [30] Pankaj Chandra, Santosh Soni, Akanksha Gupta, Bindu Tiger, Vikrant Kumar Gupta, Parshant Yadav, Satyendra Kumar, “STEAM GAURDIAN: A Smart Web Application for Instant Online Meetings”, Journal of Data Acquisition and Processing, Volume No.39, Issue 1, 2024, ISSN 1004-9037. [Peer Reviewed]
- [31] Chandra, P., Soni, S. A New Mobile Data Collection (ODDCMS) Algorithm Using Mobile Sink in Rechargeable Wireless Sensor Network. *SN COMPUT. SCI.* **5**, 815 (2024). <https://doi.org/10.1007/s42979-024-03169-6>. [Scopus Indexed]
- [32] Komal Baburao Umare, Aman Bajpai, Dr. B. Jothi, P. Arulpandy, Dr. K. Michael Angelo, Pankaj Chandra, “AI-Based Signal Processing for Enhanced Image Reconstruction”, Frontiers in Health Informatics, Volume No. 13, Issue 8, 2024, ISSN 2676-7104. [Peer Reviewed]
- [33] Chandra, P., Soni, S. Novel joint data collection and wireless charging algorithm for rechargeable wireless sensor networks. *Peer-to-Peer Netw. Appl.* **18**, 76 (2025). <https://doi.org/10.1007/s12083-024-01870-0>. [SCI]

Conferences -

Title of Paper	Name of Conference	Organizer	Date	National/ International
Case Based Reasoning System for Ship Motion Control	Advance Computing & Communication Technology	Dept. of CS & IT, Chouksey Engineering College, Bilaspur	28.01.12	National
Enhanced Decision Support System for Share Market Analysis	Management Encounters	Dept. of Management, Chouksey Engineering College, Bilaspur	26.02.12	National
Evolution of Mobile Wireless Network : From 1G to 5G [Past, Present and Future]	Bharat Rejuvenation	Guru Ghasidas Vishwavidyalaya, Bilaspur	15.10.17 to 17.10.17	International
Study on Data Encryption and Decryption using RSA Algorithm	Techno-A-Tech 2018	Chouksey Engineering College, Bilaspur	26.10.18 to 27.10.18	International
Performance Analysis of AODV, DSDV and DSR protocols in MANET under CBR Traffic	International Conference on Emerging Trends in Multidisciplinary Research and Innovation [ICETMRI-2022]	LCIT Group of Institutions, Bilaspur, Chhattisgarh	19.01.22 to 20.01.22	International
Fake News Detection Using Machine Learning Algorithms	International Conference on Cryptology and Network Security with Machine Learning	Pranveer Singh Institute of Technology (PSIT), Kanpur	16.12.22 to 18.12.22	International

	[ICCNSML]			
Farmo Consultant (AI Based Crop Recommended System)	Latest Trends in Engineering and Management (ICLTEM - 2023)	Institute for Engineering Research and Publication (IFERP)	23.03.23 to 24.03.23	International
Recession Prediction using Machine Learning Algorithms	SGGVS-AIMT SPRING 2023	Sant Gahira Guru Vishwavidyalaya Sarguja, Ambikapur	29.04.23 to 30.04.23	International
The design and analysis of an on-demand data collection system in wireless sensor networks using mobile sink	International Conference On Innovations in Science, Management and Technology (ICISMT)	Chaudhary Devi Lal University Sirsa, Haryana, India	17.08.23 to 18.08.23	International
EECP+: An Enhanced Energy-Efficient Clustering Protocol for WSN	International Conference On Innovations in Science, Management and Technology (ICISMT)	Chaudhary Devi Lal University Sirsa, Haryana, India	17.08.23 to 18.08.23	International
A New Approach to Wireless Charging & On Demand Data Gathering for RWSN	Innovation Research in Science. Management and Technology (ICIRSMT)	Atal Bihari Vajpayee University, Bilaspur	05.01.24 to 07.01.24	International

Industrial Trainings Programs Attended -

Title	Organisation / Institute	Date
Cyber Security Measures and Tools	NITTTR Chandigarh	22.06.20 to 03.07.20
Office Automation	E2Attach Engineering PVT. LTD., Chennai	30.05.22 to 11.06.22
Internet of Things (IOT)	Academy of Skill Development	05.05.25 to 17.05.25

FDP/ STTP/ Workshop/ Refresher/ Orientation Courses Attended -

Title	Type of Course	Organisation / Institute	Date
Nonlinear Systems : Mathematical Modelling & Computer Simulations	STTP	NIT Raipur	04.01.16 to 08.01.16
Mathematical Modelling & Computational Techniques in Science & Engineering	STTP	NIT Raipur	14.03.16 to 18.03.16
16 th Orientation Programme	Orientation	HRDC, GGV	30.05.16 to 25.06.16
Advances in Engineering & Technology	Refresher	HRDC, GGV	05.06.17 to 24.06.17
Research Methodology	Refresher	HRDC, GGV	16.06.18 to 06.07.18
Recent advances in Emerging Area of Engineering. Technical Education & Research	Refresher	HRDC, GGV	24.06.19 to 06.07.19
Internet of Things	FDP	NITTTR,	10.04.20 to 14.04.20

		Chandigarh	
Cyber Security	FDP	NITTTR, Chandigarh	08.06.20 to 19.06.20
Data Science	FDP	NITTTR, Chandigarh	12.10.20 to 16.10.20
Control Systems & Sensors Technology	FDP	BIT Durg	02.11.20 to 06.11.20
Skill Development for Technology Transfer	Workshop	GGV, Bilaspur	13.09.21 to 18.09.21
Devices for Modern Wireless Communication System	FDP	GGV, Bilaspur	20.09.21 to 24.09.21
Nanotechnology enabled wireless communication and IOT	FDP	NITTTR, Chandigarh & GGV, Bilaspur	25.04.22 to 29.04.22
Image Processing using MATLAB	FDP	NITTTR, Chandigarh	25.07.22 to 05.08.22
Nano sensors& Devices	FDP	NITTTR, Chandigarh & GGV, Bilaspur	22.08.22 to 26.08.22
Emerging Technology in Academic Accreditation & Ranking	Refresher	HRDC, GGV	09.10.23 to 21.10.23
NEP 2020 Orientation and Sensitization Programme	MMTTP	MMTTC, Bilaspur	04.03.24 to 13.03.24
AI Innovations in Computer Vision, Medical Imaging, and IoT: Emerging Trends and Research Perspectives	FDP	NIT, Warangal	08.01.25 to 18.01.25

Workshop/Lecture Conducted –

Title	Collaboration with / Speaker	Role	National/International	Date
Cyber Crime & Forensic Tools	NITTTR Chandigarh	Co-coordinator	National	23.05.22 to 27.05.22
Cyber Threats and Security Measures	NITTTR Chandigarh	Co-coordinator	National	25.07.22 to 29.07.22
International Lecture Series	TCS, USA	Coordinator	International	27.07.22
Nano Sensors and Devices	NITTTR Chandigarh	Co-coordinator	National	22.08.22 to 26.08.22

Patents –

Title	Reference No.	Publication / Issue Date	Application No.	Country
An Analytics Interface for Providing Cyber Threat Detection and Security System	Publication No. - 35/2023	01.09.23	202341049516	India
A Novel System for Dynamic Recharge & Data Collection in Wireless Sensor Network Using Modified Mobile Data Collection and Mobile Charging (MDCMC) Method	---	17.01.25	202511000589	India
IoT Based Traffic Congestion Monitoring System	Design No. – 439260-001	20.02.25	439260-001	India
Traffic Congestion Monitoring System	Design No. –	21.02.25	439974-001	India

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Administrative Responsibilities–

1. IT cell member.
2. Geeks for Geeks Student Chapter – Faculty In-Charge 2023 & 2024.
3. Academic and Administrative Audit In charge of Department.
4. AQAR Criteria-4 In charge.
5. Member of Board of Studies – Information Technology.
6. Head and Chairman of Department Level Parent Teacher Association.
7. Committee Member of Earn While You Learn (EWYLS).
8. Committee Member of Preparing Department's Handbook.
9. Committee Member of Indian Society for Technical Education (ISTE).
10. Co-coordinator of NIRF Ranking – Engineering & Technology.
11. Committee Member of Physical Verification – Information Technology.
12. Techfest 2017 & 2025 Co-coordinator.
13. Exam - Assistant Centre Superintendent 2017-18, 2018-19, 2022-23 & 2023-24.
14. NAAC Criteria-3 Overall Institute Level Co-coordinator.
15. Spot Admission document verification committee member.
16. AICTE 360 Degree Feedback – Co-coordinator.

DR. PANKAJ CHANDRA

Date – 17.09.2025