



Centre/School/Special Centre

Department – Information Technology

School – School of Studies – Engineering & Technology

Phone - 08871140312

Email – santoshsoni.77@gmail.com

Qualifications –

M.Tech. (IT), PhD (CSE) November 2020 from Dept of CSE, GGV Bilaspur (CG).

Area of Interest/Specialization – Wireless Sensor Networks

Experience – 12+ Years

Best Peer Reviewed Publication –

- [1] Soni, Santosh, Shrivastava Manish., "Novel wireless charging algorithms to charge mobile wireless sensor network by using reinforcement learning", SN Applied Sciences, Vol. 1, No.9, pp.1052, 2019. [INDEXED IN SCI]
- [2] Santosh Soni, Manish Shrivastava, "*Novel Algorithm Based Upon Reinforcement Learning to Better Improve Energy Consumption in WSN*", International Journal of Computer Sciences and Engineering, Vol.07, Issue.03, pp.234-240, 2019.
- [3] Santosh Soni, Manish Shrivastava, "Novel Learning Algorithms for Efficient Mobile Sink Data Collection Using Reinforcement Learning in Wireless Sensor Network", Wireless Communications and Mobile Computing, Vol. 2018, pp. 1-13, 2018. [INDEXED IN SCI]
- [4] Santosh Soni, Manish Shrivastava, "A Review of RL algorithms & techniques for WSN implementation in large scale" International Journal of Advanced in Management, Technology and Engineering Sciences, Vol.III, Issue.III, pp.195-200, March 2018.
- [5] Santosh Soni, Manish Shrivastava, "Mobile Sink Traversal Among Wireless Sensor Network Using Reinforcement Learning To Remove Hot Spot Problem", International Journal of Advanced in Management, Technology and Engineering Sciences, Vol.III, Issue.III, pp.210-212, March 2018.
- [6] Santosh Soni, Manish Shrivastava, "Impact of Various Networks Security Attacks on Wireless Sensor Localization Algorithms Based upon WSN Node's Residual Energy", Proceedings of International Conference on Recent Advancement on Computer and Communication, Springer LNNS Book Series, Vol. 34, pp.01-10, 2018. [INDEXED IN SCOPUS]
- [7] 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 (IJTIMES), e-ISSN: 2455-2585 Volume 4, Issue 5, May-2018, pp. 31-35
- [8] Santosh Soni, Manish Shrivastava, "Various Techniques of Reinforcement Learning for implementing Wireless Sensor Network", International Journal of Creative Research Thoughts (IJCRT), Vol 06, Issue 01, ISSN : 2320-2882, Feb 2018, pp. 1206-1209
- [9] Santosh Soni, Manish Shrivastava, "Intelligent Sensor Network Algorithm Based Upon Q-learning", Review of Business and Technology Research, Vol.14, No.02, pp.100-104, 2017.
- [10] Santosh Soni, Manish Shrivastava, "Energy Analysis of LEACH & Directed Diffusion Protocols using NS2.34 ", International Journal of Innovations & Advancement in Computer Science IJIACS, ISSN 2347 – 8616 Volume 4, Special Issue March 2015, pp. 01-06

- [11] 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, July-2018, ISSN 2348-1269 [UGC Approved]
- [12] Pankaj Chandra, Santosh Soni, Mukul Gupta, "Sentiment and Gender classification using countenance", International Journal of Research and Analytical Reviews, Volume 5, Issue 4, October-2018, ISSN 2348-1269 [UGC Approved]
- [13] Pankaj Chandra, Santosh Soni, "Study of RSA Algorithm for Data Encryption and Decryption", International Journal of Research and Analytical Reviews, Volume 5, Issue 4, November-2018, ISSN 2348-1269 [UGC Approved]
- [14] 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 No.7, July-2022, ISSN 1738-7906
- [15] Pankaj Chandra, Dr. Santosh Soni, "Medical kit delivery using Drone: Critical medical infrastructure solution for emergency medical situation", International Journal of Disaster Risk Reduction, 2024

Conferences -

S.No.	Title of Conference	Dates & Venue	Title of Research Paper
1.	IEEE WOCN 2012	20th to 22nd Sep 2012, IIT Indore	Performance simulation of MANET protocols with the combination of horizontal and vertical topology using NS2
2.	International Conference on Recent Advancement and Communication [Springer]	26th & 27th May 2017, Bhopal	Impact of various network security attacks on wireless sensor localization algorithm
3.	MTMI International Conference	16th & 17th December 2017, Dubai, UAE	Intelligent sensor network algorithm based upon Q-learning
4.	International Conference on innovative research in science, management and technology	04th & 05th August 2018, Bilaspur (CG)	Novel algorithm based upon reinforcement learning to better improve energy consumption in WSN
5.	International Conference on Emerging Trends in Multidisciplinary Research and Innovation [ICETMRI-2022]	19th & 20 th January 2022	Performance Analysis of AODV, DSDV and DSR protocols in MANET under CBR Traffic

Industrial Trainings -

Title	Organisation / Institute	Date
Cyber Security Measures and Tools	NITTTR Chandigarh	22-June-20 to 03-July-20
Office Automation	E2Attach Engineering PVT. LTD., Chennai	30-May-22 to 11-June-22

Workshop/Lecture Conducted –

Title	Collaboration with / Speaker	Role	National/International	Date
Cyber Crime &	NITTTR Chandigarh	Coordinator	National	23-May-22 to 27-May-22

Forensic Tools				
Cyber Threats and Security Measures	NITTTR Chandigarh	Coordinator	National	25-July-22 to 29-July-22
International Lecture Series	TCS, USA	Coordinator	International	27-July-2022
Nano Sensors and Devices	NITTTR Chandigarh	Coordinator	National	22-Aug-22 to 26-Aug-22

Expert Lecture -

1. Topic: Application of Wireless Sensor Network at CV Raman University Kota (22nd Feb 2019).
2. Topic: Wireless Sensor Network at SAGE University Bhopal (30th July 2020).
3. Topic: Cyber Security & Current IT Trends at Rani Durgavati University Jabalpur (07th Aug 2020).
4. Topic : Application of Reinforcement Learning at Dept of CSE, GGV, Bilaspur Sponsored by Electronics Academy New Delhi & NIT Patna (26th Aug 2020).
5. Topic: K-Fold Validation & Performance Metrics at Dept of CSE, GGV, Bilaspur Sponsored by ATAL FDP AICTE New Delhi (14th Oct 2020).

Administrative Responsibilities –

1. Warden, New Boys Hostel (2017 to 2019)
2. Head (I/c), Dept of IT (2016 to 2020)
3. Member, Dept Board of Studies (2016 to 2020)
4. Member, School Board of Studies (2016 to 2020)
5. Techfest Co-ordinator (2017)
6. Discipline & Anti Ragging Committee Co-coordinator (2015 to 2017)
7. Member Training & Placement Cell (2012-2015)
8. Assistant Superintendent Examination Cell (2013-2016)
9. Lab (I/c)
10. Class (I/c)
11. ISTE School Co-ordinator (Since 2021)
12. NEP School Level Team Member (Since 2021)
13. IoT Lab In-Charge

Membership:

1. CSI Lifetime
2. IACSIT
3. IAENG

DR. SANTOSH SONI

Date – 24.01.2025