



- **Name:** DR. SANTOSH SONI
- **Father's Name:** SHRI K.L.SONI
- **Mother's Name:** SMT. USHA SONI
- **Date of Birth:** 28-01-1977
- **Designation:** Assistant Professor, Dept of IT, SOS (Engg. & Tech.),GGV (Central University), Bilaspur (Since July 2011)
- **Qualification:** M.Tech. (IT), PhD (CSE) November 2020 from Dept of CSE, GGV Bilaspur (CG)
- **Experience:** 12+ Years
- **Subject:** WSN, Network Security, DBMS, OOPs
- **Skill:** Dot Net, Java, SQL, MATLAB, NS2
- **Title of PhD:** "DESIGN AND ANALYSIS OF EFFICIENT LEARNING ALGORITHM FOR WIRELESS SENSOR NETWORK BASED ON REINFORCEMENT LEARNING"
- **Supervisor:** Dr. Manish Shrivastava

Publications:

- 1) Santosh Soni, Manish Shrivastava "Green Corridor: A Self Learning and Educating Algorithm for Engineers (Industry/Students) To Send Data in Emergency Situations through Wireless Sensor Network", *IJEEEE*, vol.56, issue 04, pp.203-219, 2019. **[INDEXED IN SCI]**
- 2) 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]**
- 3) 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.
- 4) 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]

- 5) 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.
- 6) 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.

- 7) 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]

- 8) 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
- 9) 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
- 10) 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.
- 11) 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

Conferences

S.No.	Title of Conference	Dates & Venue	Title of Research Paper
1.	IEEE WOCN 2012	20 th to 22 nd 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]	26 th & 27 th May 2017, Bhopal	Impact of various network security attacks on wireless sensor localization algorithm
3.	MTMI International Conference	16 th & 17 th December 2017, Dubai, UAE	Intelligent sensor network algorithm based upon Q-learning
4.	International Conference on	04 th & 05 th	Novel algorithm based upon

	innovative research in science, management and technology	August 2018, Bilaspur (CG)	reinforcement learning to better improve energy consumption in WSN
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Expert Lecture:

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

Administrative Responsibilities:

- Warden, New Boys Hostel (2017 to 2019)
- Head (I/c), Dept of IT (2016 to 2020)
- Member, Dept Board of Studies (2016 to 2020)
- Member, School Board of Studies (2016 to 2020)
- Techfest Co-ordinator (2017)
- Discipline & Anti Ragging Committee Co-coordinator (2015 to 2017)
- Member Training & Placement Cell (2012-2015)
- Assistant Superintendent Examination Cell (2013-2016)
- Lab (I/c)
- Class (I/c)

Courses Attended:

Orientation

- From 30/05/2016 to 25/06/2016 at HRDC GGU [UGC-SPONSERED] With 'A' Grade

Refresher

- From 16/06/2018 to 06/07/2018 at HRDC GGU [UGC-SPONSERED] With 'A' Grade
- From 24/06/2019 to 06/07/2019 at HRDC GGU [UGC-SPONSERED] With 'A' Grade

Others

Sl no.	Course Title	Year	OPlan No.	Start Date	End Date	Venue	Coordinating Dept.
1	Internet of Things	2020-2021	ICTO-04	10-04-20	14-04-20	NITTTR, Chandigarh	Computer Science and Engineering
2	Linux Applications in Engineering Education	2020-2021	ICTO-20	27-04-20	01-05-20	NITTTR, Chandigarh	Computer Science and Engineering
3	Internet of Things	2020-2021	ICTO-11	15-04-20	19-04-20	NITTTR, Chandigarh	Computer Science and Engineering
4	Neural Network and CNN	2020-2021	ICTO-06	20-04-20	24-04-20	NITTTR, Chandigarh	Curriculum Development Centre
5	Data Science using R	2020-2021	ICTO-35	11-05-20	15-05-20	NITTTR, Chandigarh	Computer Science and Engineering
6	Academic Leadership Enhancement in Technical Institutions	2020-2021	ICTO-51	04-05-20	08-05-20	NITTTR, Chandigarh	Electronics and Communication Engineering
7	Technological Interventions using Wireless Communication	2020-2021	ICTO-53	18-05-20	22-05-20	NITTTR, Chandigarh	Electronics and Communication Engineering
8	Understanding Project Management Basics	2020-2021	ICTO-48	25/05/2020	29/05/2020	NITTTR, Chandigarh	Entrepreneurship Development and Industrial Coordination
9	Cyber Security	2020-2021	ICTO-72	08/06/2020	19/06/2020	NITTTR, Chandigarh	Computer Science and Engineering

Membership:

- CSI Lifetime
- IACSIT
- IAENG

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