

CURRICULUM VITAE		
DEMOGRAPHIC AND PERSONAL INFORMATION MANSI SAHI		
Contact Information	Dr. Mansi Sahi Assistant Professor (Senior Grade) Department of CSE/IT, JUIT Waknaghat, Solan, Himachal Pradesh, India	Voice: +91-9872338408 Email: mansi.sahi@gmail.com
EMPLOYMENT HISTORY		
Title/Position	University/Institution	Duration
Assistant Professor (SG)	JUIT Waknaghat, Solan, Himachal Pradesh, India	June 2026 – Present
Assistant Professor	CGC Landran, Mohali, Punjab, India	June 2025 – June 2026
AI Trainer	IIT Delhi, New Delhi, India	March 2025 – June 2025
Senior Research Fellow	IIT Ropar, Punjab, India	June 2020 – July 2024
Junior Research Fellow	IIT Ropar, Punjab, India	January 2018 – June 2020
Assistant Professor	Chandigarh University, Mohali, Punjab, India	July 2017 – December 2017
EDUCATION		
Ph.D. (Computer Science and Engineering) Indian Institute of Technology, Rupnagar, Punjab, India(2018 - 2024) Title: "Parallel and distributed data analytics for time sensitive applications on fog/edge architecture."		

M.E.(Computer Science and Engineering)

University Institute of Engineering and Technology, Panjab University, Chandigarh (2014 - 2016)

Title: "Plagiarism detection in English documents Exploiting Information Sources "

B.Tech (Computer Science and Engineering)

Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh, India, (2009 – 2013)

RESEARCH INTERESTS

- Artificial Intelligence
- Machine Learning
- Distributed computing
- Edge Computing
- Fog Computing
- Data Science
- Natural Language Processing

M.TECH STUDENT SUPERVISED

Ms. Meemansha Jain Time series forecasting of blood glucose levels in diabetic patients using AI techniques

RESEARCH PROFILE

1. Google Scholar <https://scholar.google.com/citations?user=1cFfsuEAAAAJ&hl=en>
2. ORCID <https://orcid.org/0009-0000-9282-9358>
3. LinkedIn <https://www.linkedin.com/in/mansi-sahi-9001a2206>

RESEARCH PUBLICATIONS**Journals:**

1. Mansi Sahi, Nitin Auluck, Akramul Azim, Pooja Bhardwaj, and M. A. Maruf. "Data Driven Deep Neural Network Based Task Offloading on Edge Cloud Continuum." *IEEE Transactions on Network and Service Management* (2025).

(SCI indexed, IF:5.4) Q1-Journal

<https://ieeexplore.ieee.org/abstract/document/11315160>

2. Rajarajan Ganesan, Tarunpreet Kaur, Alisha Mittal, Mansi Sahi, Sushant Konar, Tanvir Samra, Goverdhan Dutt Puri, Shayam Kumar Singh Thingnum, and Nitin Auluck. "Application of concept drift detection and adaptive framework for non linear time series data from cardiac surgery." *Computational Intelligence* 40, no. 3 (2024) e12658.

(SCI indexed, IF:1.7) Q3-Journal <https://doi.org/10.1111/coin.12658>

3. Mansi Sahi, Nitin Auluck, Akramul Azim, and Md Al Maruf. "Dynamic hierarchical intrusion detection task offloading in IoT edge networks." *Software: Practice and Experience* 54, no. 11 (2024): 2249-2271.

(SCI indexed, IF:2.7) Q2-Journal Core-B

<https://doi.org/10.1002/spe.3338>

4. Md Al Maruf, Akramul Azim, Nitin Auluck, and Mansi Sahi. "Optimizing DNN training with pipeline model parallelism for enhanced performance in embedded systems." *Journal of Parallel and Distributed Computing* 190 (2024): 104890.

(SCI indexed, IF:4.0) Q1-Journal Core-A

<https://www.sciencedirect.com/science/article/pii/S0743731524000546>

5. Sushant Konar, Nitin Auluck, Rajarajan Ganesan, Atul Kumar Goyal, Tarunpreet Kaur, Mansi Sahi, Tanvir Samra, Shyam Kumar Singh Thingnam, and Goverdhan Dutt Puri. "A non-linear time series based artificial intelligence model to predict outcome in cardiac surgery: Puri et al." *Health and Technology* 12, no. 6 (2022): 1169-1181,

(SCI indexed, IF:2.8) Q2-Journal

<https://link.springer.com/article/10.1007/s12553-022-00706-2>

6. Mansi Sahi and Vishal Gupta. "A novel technique for detecting plagiarism in documents exploiting information sources." *Cognitive Computation* 9, no. 6 (2017): 852-867,

(SCI indexed, IF:4.3) Q1-Journal

<https://link.springer.com/article/10.1007/s12559-017-9502-4>

Conferences:

1. Md Al Maruf, Akramul Azim, Nitin Auluck, and Mansi Sahi. "Towards safe online machine learning model training and inference on edge networks." In *2023 International Conference on Machine Learning and Applications (ICMLA)*, pp. 1082-1089. IEEE, 2023. <https://ieeexplore.ieee.org/abstract/document/10459782>
2. Mansi Sahi, Mahip Soni, and Nitin Auluck. "An intrusion detection system on fog architecture." In *2021 IEEE 18th International Conference on Mobile Ad Hoc and Smart Systems (MASS)*, pp. 591-596. IEEE, 2021. <https://ieeexplore.ieee.org/abstract/document/9637755>
3. Mansi Sahi, Md Al Maruf, Akramul Azim, and Nitin Auluck. "A framework for partitioning support vector machine models on edge architectures." In *2021 IEEE International Conference on Smart Computing (SMARTCOMP)*, pp. 293-298. IEEE, 2021. <https://ieeexplore.ieee.org/abstract/document/9556256>
4. Mansi Sahi and Vishal Gupta. "Efficiency comparison of various plagiarism detection techniques." In *2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT)*, pp. 2974-2978. IEEE,

2016.

<https://ieeexplore.ieee.org/abstract/document/7755245>

Book Chapters:

1. Mansi Sahi and Nitin Auluck. "An IoT-Based Intelligent Irrigation Management System." In *Edge AnalyticsADCOM 2020, Lecture Notes in Electrical Engineering*, 783, pp. 1-16. Singapore: Springer Singapore, 2022.

(SCOPUS indexed Book Chapter)

https://link.springer.com/chapter/10.1007/978-981-19-0019-8_1

PATENTS FILED

SR. NO.	TITLE OF INVENTION	APPLICATION NO.	DATE OF FILING
1	A REAL-TIME JOINT HEALTH MONITORING WEARABLE DEVICE	202611014987	11/02/2026
2	INTELLIGENT DUAL-SENSOR ACTIVATED SCENT-DISPENSING COLLAR SYSTEM FOR SELECTIVE GARBAGE-INGESTION DETERRENCE IN CATTLE	202611028034	10/03/2026
3	AN IMPROVED HYPERLOCAL AIR-POLLUTION PREDICTION AND ALERT SYSTEM	202611028033	10/03/2026
4	AN IMPROVED MULTI-SOURCE ENERGY HARVESTING AND ENERGY MANAGEMENT SYSTEM	202611029523	12/03/2026
5	HANDHELD PERSONAL INHALATION AIR FILTRATION DEVICE FOR REDUCING CUMULATIVE EXPOSURE TO AIRBORNE CONTAMINANTS	202611033812	20/03/2026
6	A GEO-FENCE BASED VENDOR COMPLIANCE MONITORING AND TRANSACTION CONTROL SYSTEM	202611037835	27/03/2026
7	AN AUTONOMOUS HEALTH MONITORING AND NON-INVASIVE ASSISTANCE SYSTEM	202611040336	30/03/2026

8	AN ADVANCED ATMOSPHERIC WATER HARVESTING SYSTEM FOR EXTRACTING WATER FROM AMBIENT AIR	202611058771	08/05/2026
9	NEUROREVIVE HEADSET – A PORTABLE BRAIN RECOVERY SYSTEM	202611058777	08/05/2026
10	LIFE-SAVING GAS DETECTION AND EMERGENCY RESPONSE SYSTEM	202611060584	12/05/2026

SESSION CHAIR

- International conference ICCMST 2025 held in August 2025

PARTICIPATION OF SEMINARS/WORKSHOPS/SCHOOLS

- Innovation Ambassador (Foundation Level) certified by the Ministry of Education's Innovation Cell (MoE) & AICTE, Government of India (2025–26).
- Presented my research at the India–Dalhousie Student Research Symposium on “Addressing Common Challenges via Research & Innovation,” organized by Dalhousie University, Canada (July 2023).
- FDP: A Roadmap for Holistic, Multi-Disciplinary and Future Ready Higher Education (June 2025).
- FDP: Future Ready Skills: Embracing Innovation in Emerging Technologies (July 2025).
- Workshop: Patent to Product: Bridging Innovation and Market (July 2025)
- Conference: COMSYS - 2022, IIT Ropar (December 2022)
- Presented my research at the India–Dalhousie Student Research Symposium on “Addressing Common Challenges via Research & Innovation,” organized by Dalhousie University, Canada (July 2022).
- Workshop: Smart Computing (SMARTCOMP) (March 2021)
- Conference: International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), IEEE (March 2016)

CONTRIBUTION TO ACADEMICS ACTIVITIES

- Reviewer for *Scientific Reports*, a journal published by Springer Nature..
- Reviewer for *Concurrency and Computation: Practice and Experience* (Wiley).
- Mentor a team in NSD (National Science Day) 2025
- Judge (internal) at the technical event of the Parivartan (October 2025)
- Expert committee member for the evaluation of research publications (2024-25)
- Mentor for several teams in SIH (Smart India Hackathon) 2024

INVITED SPEAKER/TALKS/LECTURES:

- AI expert in the Lecture titled Natural Language Processing: Concepts, Applications, and Text Processing Techniques' organized by Multi-Tiered AI & Data Management Training Program for Northern Command, held by the (FITT) Foundation for Innovation and Technology Transfer & IIT Delhi, (Feb 2026)
- Delivered a Talk in Advanced AI Training Program on the topic "Deep Learning Foundations and Architectures" for National Informatics Centre (NIC) Officers, with FITT (Foundation for Innovation and Technology Transfer), IIT Delhi." organized in IIT Delhi (Sonapat Campus), Sonapat, Haryana (March 2026)

TEACHING

- Data Structures and Algorithms (UG)
- Design and Analysis of Algorithms (UG)
- Database Management System (UG)
- Operating Systems (UG)
- Machine Learning (UG)
- Data Science (PG)