

CURRICULUM VITAE

DEMOGRAPHIC AND PERSONAL INFORMATION

SAURABH SHARMA



Contact Information

Dr. Saurabh Sharma
Member ACM
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Assistant Professor (Senior Grade)
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JUIT Waknaghat, Solan, Himachal Pradesh, India

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EMPLOYMENT HISTORY

Title/Position	University/Institution	Duration
Assistant Professor (SG)	JUIT Waknaghat, Solan, Himachal Pradesh, India	Feb 2026 - Present
Assistant Professor	CGC Landran, Mohali, Punjab, India	May 2024 – Feb 2026
Assistant Professor	Baddi University of Emerging Sciences and Technology, Baddi, Himachal Pradesh, India	May 2013 – November 2014
Lecturer	Gurukul Vidyapeeth, Banur, Mohali, Punjab, India	August 2009 – July 2010
Lecturer	Swami Parmanand College of Engineering and Technology, Lalru, Mohali, Punjab, India	January 2008 - September 2008

EDUCATION

Ph.D. (Computer Science and Engineering)

University Institute of Engineering and Technology, Panjab University, Chandigarh (2014 - 2023)

Title: "Decision support system for categorization of user behavior using big data analysis"

M.E. (Computer Science and Engineering)

University Institute of Engineering and Technology, Panjab University, Chandigarh (2010 - 2012)

Title: "Domain-based Punjabi Text Document Clustering"

B.Tech (Computer Science and Engineering)

Swami Devi Dayal Institute of Engineering and Technology, Barwala, Kurukshetra University, (2003 – 2007)

RESEARCH INTERESTS

- Artificial Intelligence
- Machine Learning
- Data Science
- Natural Language Processing
- Distributed computing
- Big data analysis
- Social network analysis
- User behavior analysis

M.TECH STUDENT SUPERVISED

Ms. Rajveer Kaur Semi-Automatic Ontology Graph Generation System in Punjabi (2014)

RESEARCH PROFILE

1. Google Scholar <https://scholar.google.com/citations?user=uMiUav8AAAAJ&hl=en>
2. ACM <https://dl.acm.org/profile/99659453203>
3. ORCID <https://orcid.org/0000-0002-3213-8819>
4. LinkedIn <https://www.linkedin.com/in/dr-saurabh-sharma-4674b6313/>

RESEARCH PUBLICATIONS

Journals:

1. **Saurabh Sharma**, Vishal Gupta, Role of Twitter User Profile Features in Retweet Prediction for Big Data Streams, *Multimedia Tools and Applications*, 81, 27309 - 27338, Springer, Netherlands, 2022, <https://doi.org/10.1007/s11042-022-12815-1> **(SCI indexed)**
2. Rajveer Kaur, **Saurabh Sharma**, Pre-processing of Domain Ontology Graph Generation System in Punjabi, *International Journal of Engineering Trends and Technology (IJETT)*, 17, 3, 141-146, November, 2014, <https://www.doi.org/10.14445/22315381/IJETT-V17P229> **(SCOPUS indexed)**
3. **Saurabh Sharma**, Vishal Gupta, Punjabi Documents Clustering System, *Journal of Emerging Technologies in Web Intelligence*, 5, 2, 171-187, May, 2013, <https://www.doi.org/10.4304/jetwi.5.2.171-187> **(SCOPUS indexed)**
4. **Saurabh Sharma**, Vishal Gupta, Recent Developments in Text Clustering Techniques, *International Journal of Computer Applications*, 37, 6, 14-19, January, 2012, <https://www.doi.org/10.5120/4611-6604>

5. **Saurabh Sharma**, Vishal Gupta, Hybrid Approach for Punjabi Text Clustering, *International Journal of Computer Applications*, 52, 1, 32-36, August, 2012, <https://www.doi.org/10.5120/8167-1407>
6. Rajveer Kaur, **Saurabh Sharma**, Techniques of Ontology and its Usage in Indian Languages - A Review, *International Journal of Computer Applications*, 114, 5, 24-35, March, 2015, <https://www.doi.org/10.5120/19975-1873>

Conferences:

1. Rajveer Kaur, Saurabh Sharma, Semi-Automatic Domain Ontology Graph Generation System in Punjabi, Proceedings of the *Second International Conference on Information and Communication Technology for Competitive Strategies*, 72, 1-5, ACM, New York, NY, USA, 2016, <https://doi.org/10.1145/2905055.2905131> (**SCOPUS indexed**)
2. Saurabh Sharma, Vishal Gupta, Punjabi Text Clustering by Sentence Structure Analysis, Proceedings of *International Workshop on NLP (NLP - 2012)*, 237-244, <https://doi.org/10.5121/CSIT.2012.2420>
3. Saurabh Sharma, Vishal Gupta, Domain based Punjabi Text Document Clustering, Proceedings of *COLING 2012: Demonstration Papers*, 393-400, Mumbai, December, 2012 <https://aclanthology.org/C12-3049.pdf> (**CORE A rank conference**)

Book Chapters:

1. Saurabh Sharma, Vishal Gupta, Retweet Prediction for Large Datasets of Random Tweets, Kumar, A., Senatore, S., Gunjan, V.K. (eds) *ICDSMLA 2020, Lecture Notes in Electrical Engineering*, 783, 665-673, Springer, Singapore, 2021, https://doi.org/10.1007/978-981-16-3690-5_60 (**SCOPUS indexed Book Chapter**)
2. Saurabh Sharma, Vishal Gupta, Rio Olympics 2016 on Twitter: A Descriptive Analysis, Singh, V., Asari, V.K., Kumar, S., Patel, R.B. (eds) *Computational Methods and Data Engineering, Advances in Intelligent Systems and Computing*, 1257, 151-162, Springer, Singapore, 2020, https://doi.org/10.1007/978-981-15-7907-3_12 (**SCOPUS indexed Book Chapter**)

PATENTS FILED

SR. NO.	TITLE OF INVENTION	APPLICATION NO.	DATE OF FILING
1	EMERGENCY ROUTING SYSTEM	202511005687	23 JANUARY 2025
2	SMART AUTOMATED TRAFFIC MANAGEMENT SYSTEM FOR AMBULANCE EMERGENCY CLEARANCE	202511039732	24 APRIL 2025

3	SMART MULTI MODAL ASSISTIVE SYSTEM FOR DEAF, MUTE AND BLIND INDIVIDUALS	202511042120	30 APRIL 2025
4	AN ADVANCED WEARABLE X-RAY IMAGING DEVICE FOR REAL-TIME HOLOGRAPHIC VISUALIZATION AND ANOMALY DETECTION	202511046267	14 MAY 2025
5	SMART PUBLIC WASHROOM SYSTEM	202511049782	23 MAY 2025
6	A SYSTEM AND A METHOD FOR SMART WASTE MANAGEMENT (PUBLISHED)	202511061861	28 JUNE 2025
7	A SMART AERO HARVEST SYSTEM	202511063772	3 JULY 2025
8	AN AUTOMATED MEDICATION DISPENSER WITH INTEGRATED VITAL SIGNS MONITORING AND REMOTE ALERTING SYSTEM	202511066423	11 JULY 2025
9	A DIGITAL HEALTHCARE SYSTEM WITH INTEGRATED ACCESS TO HOSPITALS, MEDICAL STORES, AND DIAGNOSTIC TESTS	202511076215	8 AUGUST 2025
10	AN IMPROVED QUANTUM-ENTANGLEMENT-BASED RADAR SYSTEM FOR OBSTACLE DETECTION IN AUTONOMOUS VEHICLES	202511080029	22 AUGUST 2025
11	AN ADVANCED QUANTUM-SYNCHRONIZED AND GESTURE-CONTROLLED BASED ROBOTIC VEHICLE CONTROLLING SYSTEM	202511080030	22 AUGUST 2025
12	AN IOT BASED VERTICAL FARMING CONTROLLING SYSTEM FOR TRAFFIC JUNCTION	202511087369	12 SEPTEMBER 2025
13	AN IMPROVED BIOPSY NEEDLE FOR IN-SITU CANCER DETECTION IN REAL-TIME	202511089730	19 SEPTEMBER 2025
14	AN AUTOMATIC UNDERWATER ROBOTIC VEHICLE FOR DRONE DETECTION	202511095002	3 OCTOBER 2025
15	MULTILINGUAL DIGITAL TYPEWRITER WITH INTEGRATED AI PROCESSING	202511095004	3 OCTOBER 2025
16	AN IMPROVED NEO ENTANGLE DIODES BASED QUANTUM COMMUNICATION SYSTEM AND METHOD	202511097654	9 OCTOBER 2025
17	AN AUTONOMOUS NATURE-BASED RIVER PURIFICATION AND MONITORING SYSTEM	202511097655	9 OCTOBER 2025

18	A SMART STEPWELL SYSTEM FOR HARVESTING RAINWATER	202511098318	11 OCTOBER 2025
19	A PAVEMENT SYSTEM FOR NOISE REDUCTION	202511098319	11 OCTOBER 2025
20	AN IMPROVED DECENTRALIZED WATER QUALITY MONITORING SYSTEM	202511098322	11 OCTOBER 2025
21	AN AI-POWERED AUTONOMOUS TATTOO MACHINE WITH REAL-TIME SKIN STABILIZATION	202511099922	15 OCTOBER 2025
22	AN ECO-FRIENDLY BAMBOO MILK BOTTLE AND METHOD OF PREPARATION THEREOF	202511099924	15 OCTOBER 2025
23	INFRARED-ENHANCED SMART CONTACT LENS WITH MULTI-SPECTRAL IMAGING AND AUGMENTED REALITY DISPLAY	202511103138	24 OCTOBER 2025
24	AN IMPROVED DISCREET AUDIO COMMUNICATION DEVICE	202511103140	24 OCTOBER 2025
25	SMART DIGITAL WALKING STICK FOR ELDERLY ASSISTANCE	202611001267	6 JANUARY 2026
26	AN AI-BASED STUTTER CORRECTION AND PROSODY-PRESERVING SPEECH EDITING SYSTEM	202611001275	6 JANUARY 2026
27	AN IMPROVED SYSTEM FOR ROADSIDE MECHANIC DEPLOYMENT	202611001273	6 JANUARY 2026
28	MODULAR BIODEGRADABLE SMART PACKAGING APPARATUS WITH INTEGRATED GAS SENSOR AND WIRELESS FRESHNESS MONITORING	202611001272	6 JANUARY 2026
29	INFRARED-COMPATIBLE EYE-SAFE SMART CONTACT LENS WITH MULTIMODAL IMAGING, BIOCHEMICAL SENSING	202611002052	8 JANUARY 2026
30	A TRANSACTION PROTECTION SYSTEM FOR SECURING ATM CARD USAGE AND ENABLING REAL-TIME LOCATION TRACKING DURING THEFT	202611003410	13 JANUARY 2026
31	FOOD DETECTING SMARTWATCH FOR REAL-TIME HEALTH-BASED FOOD EVALUATION	202611002615	9 January 2026

32	A TRANSACTION PROTECTION SYSTEM FOR SECURING ATM CARD USAGE AND ENABLING REAL-TIME LOCATION TRACKING DURING THEFT	202611003410	13 January 2026
33	A BIODEGRADABLE MULTI-LAYER MILK STORAGE BOTTLE AND ITS METHOD OF PREPARATION	202611009575	30 January 2026
34	A SUSTAINABLE MODULAR BAMBOO TOOTHBRUSH	202611009574	30 January 2026
35	A REAL-TIME JOINT HEALTH MONITORING WEARABLE DEVICE	202611014987	11 February 2026

SESSION CHAIR

- International conference ICCMST 2025 held in August 2025

PARTICIPATION OF SEMINARS/WORKSHOPS/SCHOOLS

- FDP: Artificial Intelligence and Its Practical Scope (December 2024)
- FDP: Innovate, Educate, Elevate: Advancing Skills in Latest Emerging Technological Trends (July 2024)
- Conference: ICDSMLA 2020 (December 2020)
- Workshop: VIRTUAL LABS: IIT DELHI (February 2020)
- Workshop: IPR workshop - 'Patents' and 'Copyrights' (February, 2020)
- Conference: ICMDE - 2020, Springer (January 2020)
- Workshop: Academic Publishing for Quality Research: How to Get Published & Avoid Pitfalls by WILEY (December 2019)
- Workshop: Recent Research Trends in Social Media and Network Analysis (March 2017)
- Conference: 11th Chandigarh Science Congress, CHASCON 2017 (March 2017)
- Conference: International Conference on Digital Libraries 2013 (November 2013)
- FEP: Agile Software Development by Infosys (September 2013)

CONTRIBUTION TO ACADEMICS ACTIVITIES

- Reviewer of ICSC-2025 held at IIIT, Noida in February 2025
- Research & Development Coordinator (Department level) 2025
- Judge (internal) at NSD (National Science Day) 2025
- Judge (internal) at the technical event of the ACM student chapter (March 2025)
- Expert committee member for the evaluation of research publications (2024-25)
- Judge (internal round) at SIH (Smart India Hackathon) 2024

INVITED SPEAKER/TALKS/LECTURES:

- AI expert in the panel discussion titled 'AI and the Future of Communication' organized by CSDE (Centre for Skill Development and Entrepreneurship), held at the University Business School, Panjab University, Chandigarh, in July 2025

- Keynote speaker in national webinar on the topic "Big Tent View on Data Science" organized by Surendera Group of Institutions, Sri Ganganagar, Rajasthan (July 2020)

PROFESSIONAL MEMBERSHIP

ACM Professional Membership: 8936291

CSI lifetime Membership: I1501851

TEACHING

- Automata Theory and Formal Languages (UG)
- Compiler Design (UG)
- Unix Linux Programming (UG)
- C/C++ language (UG)
- Operating Systems (UG)
- Computer Hardware & Peripherals (UG)
- Computer Architecture (UG)