

# Dr. Dheeraj Kumar

Assistant Professor

Hansraj College, University of Delhi

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<https://scholar.google.com/citations?user=DqXDe0kAAAAJ&hl=en> (Google Scholar)



## Personal Details

- Full Name: Dr. DHEERAJ KUMAR
- Date of Birth: 09 December 1995
- Father Name: Shri Kamal Kumar
- Permanent Address: Village Ghartholi, P.O. Nihari, Dist. Kangra, Himachal Pradesh- 177034.
- Mailing Address: School of Computer Applications, IMS Unison, Dehradun, Uttarakhand 248009.
- Mobile: 9459894780
- Marital Status: Single
- Nationality: Indian

## Education

- 2024 – Present **Assistant Professor**, Presently working in the Department of Computer Science at Hansraj College, University of Delhi.
- 2020 – 2024 **Ph.D.**, Central University of Himachal Pradesh (NAAC Grade A<sup>+</sup>),  
Thesis title: *IoT and Cloud-Driven Data Analytics For Airborne Diseases*
- 2019 **UGC NET with JRF**, Qualified in Computer Science and Applications
- 2017 – 2019 **M.Sc. Information Technology, Central University of Himachal Pradesh (NAAC Grade A<sup>+</sup>)- 73.09%**
- 2014 – 2017 **Bachelor of Computer Application, Govt. Degree College Bangana- 71.93%**
- 2014 **Higher Secondary, Govt. Sen. Sce. School Pirsaluhi Stream: Non-Medical - 60%**

## Research Publications

### Publication in SCI/SCIE/Scopus/ Indexed Journals (Cumulative Impact Factor: 54.6)

- 1 D. Kumar, S. K. Sood, and K. S. Rawat, "Early health prediction framework using xgboost ensemble algorithm in intelligent environment," *Artificial Intelligence Review (Q1)*, vol. 56, no. Suppl 1, pp. 1591–1615, 2023. Impact Factor: 10.7 (Q1).
- 2 D. Kumar, S. K. Sood, and K. S. Rawat, "Empowering elderly care with intelligent iot-driven smart toilets for home-based infectious health monitoring," *Artificial Intelligence in Medicine*, vol. 144, p. 102 666, 2023. impact Factor: 6.1 (Q1).
- 3 D. Kumar, S. K. Sood, and K. S. Rawat, "Iot-enabled technologies for controlling covid-19 spread: A scientometric analysis using citespace," *Internet of Things*, p. 100 863, 2023. Impact Factor: 6 (Q1).
- 4 S. Prajapat, D. Kumar, and M. S. Hossain, "Secure quantum aggregate signature scheme for vehicular ad-hoc networks," *Vehicular Communications*, p. 100 974, 2025. Impact Factor: 6.5 (Q1).
- 5 S. Prajapat, D. Kumar, P. Kumar, A. K. Das, and M. S. Hossain, "A lattice-based ring signcryption scheme for secure communication in 6g-enabled vehicular ad hoc networks using blockchain," *IEEE Transactions on Intelligent Transportation Systems*, 2025. Impact Factor: 8.4(Q1).

- 6 S. Prajapat, D. Kumar, P. Kumar, M. Wazid, A. K. Das, and M. S. Hossain, "Quantum secure energy-efficient authentication protocol for digital twins-enabled transportation cyber-physical systems," *IEEE Transactions on Intelligent Transportation Systems*, 2025. Impact Factor: 8.4 (Q1).
- 7 S. Prajapat, D. Kumar, and K. Pankaj, "Quantum image encryption protocol for secure communication in healthcare networks," *Cluster Computing*, 2024. Impact Factor: 3.6 (Q1).
- 8 S. Prajapat, P. Kumar, D. Kumar, and A. K. Das, "Quantum secure authentication scheme for internet of medical things using blockchain," *IEEE Internet of Things Journal*, 2024. Impact Factor: 8.2 (Q1).
- 9 S. K. Sood, K. S. Rawat, and D. Kumar, "A visual review of artificial intelligence and industry 4.0 in healthcare," *Computers and Electrical Engineering*, vol. 101, p. 107 948, 2022. Impact Factor: 4 (Q1).
- 10 S. K. Sood, K. S. Rawat, and D. Kumar, "Analytical mapping of information and communication technology in emerging infectious diseases using citespace," *Telematics and Informatics*, vol. 69, p. 101 796, 2022. Impact Factor: 7.6 (Q1).
- 11 S. K. Sood, K. S. Rawat, and D. Kumar, "Emerging trends of ict in airborne disease prevention," *ACM Transactions on Internet Technology*, vol. 22, no. 4, pp. 1–18, 2023. Impact Factor: 3.9 (Q1).
- 12 S. K. Sood, K. S. Rawat, and D. Kumar, "Scientometric analysis of ict-assisted intelligent control systems response to covid-19 pandemic," *Neural Computing and Applications*, pp. 1–21, 2023. Impact Factor: 4.5 (Q1).
- 13 M. Tomar, S. Prajapat, D. Kumar, P. Kumar, R. Kumar, and A. V. Vasilakos, "Exploring the role of material science in advancing quantum machine learning: A scientometric study," *Mathematics*, vol. 13, no. 6, p. 958, 2025. Impact Factor: 2.2 (Q1).

## Publication in National and International Conferences


- 1 D. Kumar, S. K. Sood, and K. S. Rawat, "Digital twin for iot-inspired healthcare: Visual knowledge mapping analysis," in *National Conference on Internet of Things Embedded Systems (NCIE-2023)*, 24-25 February, 2023 (Presented).
- 2 D. Kumar, S. K. Sood, and K. S. Rawat, "Revolution of artificial intelligence and iot in healthcare: A keyword co-occurrence network analysis using cite space," in *1st International Conference on Sustainable Technologies Advances in Automation, Aerospace Robotics- STAAAR 2022*, 16th - 17th December 2022, ISBN: 978-981-99-2349-6.


## Expertise & Accomplishments

### Experience


November, 2024 - Present  **Assistant Professor at Hansraj College, Delhi University.**

### Software and Languages Proficiency

Programming Languages  **C/C++, Python.**

Research Tools  **CiteSpace, JabRef, LaTeX, Visualization Tools.**

### Awards and Achievements




2019  **UGC National Eligibility Test (NET) with Junior Research Fellowship (JRF) Award Letter.**

2017  **Annual Prize for Securing 1<sup>st</sup> Position, in BCA, HPU Shimla.**

## Expertise & Accomplishments (continued)

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### Certification

- 2023  **Presented a paper** in national conference on Internet of Things Embedded Systems (NCIE-2023)” Organized by “organized by “Department of electronics & communication engineering, NIT Kurukshetra, India”.
- 2022  **Presented a paper** in International conference on Recent Trends in Machine Learning, IOT, Smart Cities & Applications (ICMISC 2022)” Organized by “CMR Institute of Technology, Hyderabad, India”.
- 2021  **Certificate for Completing a short course on TAPAS-PRM** a Purposeful Research Methodology Organized by “Electronic and ICT Academy IIT Guwahati.”  
 **Participated in the AICTE-ISTE approved Orientation Program** on Artificial Intelligence and Machine Learning using Python organized by “Govt. Engineering College, Bikaner, Rajasthan.”
- 2020  **Web of Science Certification** for successfully completing the advanced series of the Web of Science training.

### Declaration

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I, Dheeraj Kumar, hereby declare that the information contained herein is true and correct to the best of my knowledge and belief.

Date: 25 August, 2024