



Dr. Vijay K. Chaurasiya, Ph.D. (I.T.)

Associate Professor, IIIT-Allahabad

<http://profile.iiita.ac.in/vijayk>

AREAS OF EXPERTISE

- *Internet of Things (IoT) Protocols and Applications.*
- *Wireless Networks.*
- *Wireless Sensor Networks.*
- *Routing Protocols.*
- *Resource Management in a Network.*
- *Network Performance Analysis.*
- *Smart City Applications.*
- *Database Management System.*
- *Network and Information Security.*
- *Quantum Information Technology.*
- *Internet of Things (IoT) Security.*
- *Storage Management and Applications*

PROFESSIONAL SKILLS

- *GATE (Graduate Aptitude Test Examination) -2002 with 94.81 percentile.*

PROFESSIONAL SUMMARY

I am working as an Associate Professor in the Department of Information Technology at the Indian Institute of Information Technology, Allahabad. I received a PhD in Information Technology (with specialization in Wireless Sensor Networks) from the Indian Institute of Information Technology, Allahabad, in 2010, a Master's Degree in Wireless Communication and Computing from the Indian Institute of Information Technology, Allahabad, in 2004, and a Bachelor's Degree in Computer Science and Engineering from MIET, Meerut, in 2001. I have published numerous papers in reputable international journals and conferences on topics such as Network Protocols, Cloud Computing, IoT Protocols, Routing Techniques, Clustering, Localization, Machine Learning, Image Processing, and Network and Information Security. My research interests include resource utilization in IoT networks, Wireless Sensor Networks, Routing Protocols, Network Security, Load Balancing, Data Backup and Reliability, and Information Processing and Security. I supervised more than 100 Master's and PhD theses. I am a professional member of the Association for Computing Machinery (ACM), IEEE, and Vijnana Bharati (VIBHA).

CAREER HISTORY

- I have been working at IIITA as an Associate Professor since 2017, with an AGP of 9500, and my job responsibilities include teaching, research, and administration.

- *Recipient of MHRD stipend of Rs. 5000/- p.m. during M.Tech. at IIIT Allahabad.*
- *Got a TOEFL score of 97/120.*
- *Able to create a vibrant and effective learning environment.*
- *Familiar with a variety of approaches to teaching students.*
- Worked at IIITA as an Assistant Professor since 2010, with an AGP of 8000. The job consists of teaching, research, and administration until 2017.
- Worked in IIITA as a Lecturer from June 2004 to June 2010.
- Worked as a Lecturer at IIIT-Allahabad (www.iiita.ac.in) since July 2005.
- Worked as a Research Associate at IIIT-Allahabad from July 2004 to June 2005.

PERSONAL SKILLS

- *Team orientated*
- *Student-focused*
- *Relationship building*
- *Exploring new fields of learning*
- *Focused on cutting-edge research*
- *Good managerial skills*
- *Supportive*

COURSES TAUGHT SO FAR

- *Computer Networks*
- *Network Protocols*
- *Protocol Implementation*
- *Internet Protocols*
- *Discrete Math*
- *Introduction to Programming*
- *Wireless Networks*
- *Database Management System*
- *Network Security*
- *Theory of Computation*
- *Software Architecture*

ADMINISTRATIVE EXPERIENCE

Worked in various administrative roles at IIIT Allahabad, like:

- Associate Dean (Students' Affairs)
- Chairman (Council of Wardens),
- Flexible Academic Program (FAP) Coordinator,
- DPGC Convener,
- Coordinator - M. Tech (WCC)
- Estate Officer
- Chief Proctor
- Warden

ACADEMIC QUALIFICATIONS

- **PhD** in I.T. M. Tech. in I.T., specializing in Wireless Sensor Networks, from the *Indian Institute of Information Technology*, Allahabad (U.P.), India, in July 2010. (<http://www.iiita.ac.in>)
- **M. Tech.** in I.T., with specialization in Wireless Communication and Computing, from *Indian Institute of Information Technology* Allahabad (U.P.), India, in June 2004 (<http://www.iiita.ac.in>)
- **B.Tech.** in Computer Science and Engineering, from MIET, Meerut (U.P.) India in August 2001. (<http://www.miet.ac.in>)

PERSONAL DETAILS

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IIIT Allahabad Campus, Jhalwa,
Prayagraj, UP, India – 211012.

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KEY SKILLS AND COMPETENCIES

- Languages: Python, Java, C, C++, Socket Programming.
- Internet Tool: XML, HTML, JavaScript, WML, WML script, MySQL, Perl-CGI, PHP
- Operating System: Windows, Linux
- Network Tools: NS2 Simulator, MATLAB, TinyOS
- Server Application and Network management,
- Linux programming: C, Perl, and Shell script.

LABORATORIES DEVELOPED

1. Developed Internet of Things (IoT) and Wireless Networks Research Lab.
2. Developed Network Security & Cryptography (NSC) Lab.
3. Member of the Center for Cognitive Computing.
4. Continuous involvement in MBA (I.T.), M. Tech. (WCC) and M.Tech. (Cyber Lab and Information Technology) lab development, management, and maintenance.
5. Developed Wireless Networking and Wireless Sensor Network Lab for M. Tech (WCC).
6. Developed a Specialized Computing and Research Lab for MBA (I.T.).

COLLABORATIONS WITH INDUSTRY

1. MoU with ITI Limited and the Department of Telecom, GoI, for technology transfer and consultancy.
2. MoU with VESTELLA LIMITED (VESTELLA), Rm. 1902, Easey Comm. Bldg, 253-261 Hennessy Road, Wanchai, Hong Kong, for technology transfer, consultancy, and student and staff exchange.
3. MoU with MtoV Inc., Address 315,218, Gajeong-ro, Daejeon, South Korea, for technology transfer, consultancy, and student and staff exchange.
4. MoU with VESTELLA LIMITED ("VESTELLA"), Address 17F, 201 Teheran-ro, Gangnam-Gu, Seoul, Republic of Korea, for technology transfer, consultancy, and student and staff exchange.
5. MoU with ITI Mankapur, Gonda, UP, for technology transfer and consultancy.
6. MoU with ITI Raibareilly, UP, for technology transfer and consultancy.

SELF-FINANCED SHORT-TERM COURSES CONDUCTED

1. Conducted a self-financed short-term course titled Eight Days Self-Financed Short-Term Course on Network Programming in C/C++ from June 28, 2021, to July 05, 2021
2. Conducted a self-financed short-term course titled Five Days Self-Financed Short-Term Course on Wireless Networks and IoT from July 19, 2021, to July 23, 2021

3. Conducted a self-financed short-term course titled Self-Financed Short-Term Course on IoT, Machine Learning, and Blockchain from July 18, 2022, to July 21, 2022.
4. Summer Camp on the Internet of Things and Unmanned Aerial Vehicles: This summer camp was organized by Dr Vijay Kumar Chaurasiya and Dr Suneel Yadav. The workshop was organized over 10 Days, from June 1 to 10, 2018 (3 hours per day). During this time, sharp minds were involved in project fabrication, with the full-time availability of experienced personnel in these fields.
5. Organized a Workshop on IoT using Raspberry Pi during 11-12 November 2017 in IIIT Allahabad.
6. Conducted a self-financed short-term course titled Short Term Training Course on Data Digitization, Data Warehousing, and Data Mining. 24th-28th October 2009.
7. Conducted a self-financed short-term course titled: Sensitization - cum- Awareness Program for Technology Information Facilitation. Lectures on Sensitization cum- Awareness Program for Technology Information Facilitation, from October 27, 2007, to October 28, 2007.

WORKSHOPS/CONFERENCES/SEMINARS ORGANIZED

1. Organized the IEEE International Conference on Information and Communication Technology (CICT) - 2024 at IIIT Allahabad as General Chair.
2. Organized a two-day national conference on flexible academic program (FAP) based on NEP-2020 from December 2021.
3. Member of the organizing committee of the International Conference on Bioinformatics and Systems Biology (BSB-2016).
4. Member of the organizing committee of the IEEE UP Section Conference on Electrical, Computer, and Electronics IEEE UPCON-2015.
5. Member of the organizing committee of the 7th International Conference on Intelligent Human-Computer Interaction (IHCI-2015).
6. Member of the organizing committee and one of the track coordinators of the First International Conference on Management of Technologies & Information Security, ICMIS 2010.
7. Organized IEEE-sponsored Conference on Wireless Communication and Sensor Networks, WCSN-2009.
8. Member of the Organizing Committee of a 2-day workshop on Information Security (2009).
9. Member of the organizing committee of the first science conclave in December 2009.
10. Organized a short-term training course on Data Digitization, Data Warehousing, and Data Mining.
11. Organized IEEE-sponsored Conference on Wireless Communication and Sensor Networks, WCSN-2008.

12. Member of the organizing committee of the seminar on IT-Vision 2020 organized at IIIT-Allahabad, India, in Sep 2007.
13. Member of the organizing committee of the seminar on the Information Awareness Program held at IIIT-Allahabad, India, in November 2007.
14. Member of the organizing committee of the International Conference on WCSN, held at IIIT-Allahabad, India, in December 2007.
15. Member of the organizing committee of the International Conference on WCSN, held at IIIT-Allahabad, India, in December 2006.
16. Member of the organizing committee of the International Conference on WCSN held at IIIT-Allahabad, India, in December 2005.

RECOGNITIONS AND AWARDS

1. Certificate of Appreciation for organizing Wireless Communication and Sensor Network Conference-2007 (WCSN-2007), from IIIT Allahabad on December 31, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014.
2. Certificate of Participation from The Institute for Business and Finance Research on May 27, 2011.
3. Certificate of Appreciation for IITM Workshop and Conference from IIIT Allahabad on December 31, 2010.
4. Certificate of Participation from MANIT, Bhopal, on December 14, 2017.
5. Certificate of Appreciation (Science Conclave 2008) from IIIT Allahabad on December 25, 2008.
6. Certificate of Appreciation for organizing Sensitization -cum-Awareness Program for Technology Information Facilitation from DSIR, New Delhi, and IIIT Allahabad on October 27, 2007.

OTHER CONTRIBUTIONS

1. Delivered a talk on Knowledge Management in a Program for Technology Information Facilitation jointly organized by IIIT-A and DSIT, New Delhi.
2. Member of the sports committee of IIIT-Allahabad.
3. An active member of the organizing committee of Effervescence from 2007 to 2016.
4. An active member of the Organizing Committee of 2 2-day workshop on Information security.
5. Reviewed papers submitted to WCSN 2007.
6. Delivered a lecture on the topic of Network Layer Issues in WSN in the preconference workshop organized during WCSN, 11-12 Dec 2007, at IIIT-Allahabad.
7. Delivered an invited talk on Knowledge Management in the preconference workshop, organized a seminar on the Information Awareness Program held at IIIT-Allahabad, India, in Nov 2007.

8. Visited China as a member of a delegation sent by IIIT-A for the 3rd Mission to China (Beijing, Shenyang, and Shanghai) for Universities, Business Schools, and Institutes of Engineering and Technology from India (Monday, June 18 until Sunday, June 24, 2007).
9. Exchanged a letter of intent for academic collaboration with Shenyang University, China.
10. Supervised many M. Tech theses, graduate and undergraduate projects.
11. National Seminar on "IPR issues and effect on Indian pharmaceutical industries", Indian Institute of Information Technology, Allahabad.

DETAILS OF FUNDED PROJECTS

1. **Project Topic:** Knowledge-driven Action for Marginalized and Agrarian Development (**KAMAD**): Rural Socio-Economic Development Program Using Data-Driven Interventions.
Role: Collaborator
Project Cost: Rs. 7.5 Cr.
Year of Award: Approved in principle. Funds are awaited.
Funded by: Madhya Pradesh Government.
Tenure: 5 Years.
Status: Yet to start.
2. **Project Topic:** 5. **चित्र**: VISIONARI (Visual Intelligence System for Integrated Outcomes, Networking and Research across Institutes)
Role: Collaborator
Project Cost: Rs. 268.66 Lacs
Year of Award: Applied
Funded by: Department of Biotechnology, Ministry of Science and Technology, Government of India.
Duration: 5 Years.
Status: Pending.
3. **Project Topic:** Science, Technology, and Innovation Hub in Information and Communication Technology (ICT) at Indian Institute of Information Technology Allahabad (IIITA), Prayagraj Block, Prayagraj District, Uttar Pradesh State.
Role: Co-Investigator
Project Cost: Rs. 186.65 Lacs
Year of Award: March 2022
Funded by: DST, GoI.

Duration: 3 Years.

Status: Completed.

4. **Project Topic:** IoT Security Project - Development of a Security Audit Framework for Secure IoT Network.

Role: Co-Investigator

Project Cost: Rs. 274.46 Lacs

Year of Award: July 2021

Funded by: C3i Hub, DST, GoI

Duration: 5 Years.

Status: Ongoing.

5. **Project Topic:** Popularizing the benefits of Information and Communication Technology (ICT) among the farmers and rural population in Prayagraj, Uttar Pradesh.

Role: Principal Investigator

Project Cost: Rs. 12.0 Lacs

Year of Award: January 2020

Funded by: NSTSC, DST, GoI.

Duration: 1 Years.

Status: Completed.

6. **Project Topic:** MedAI: An artificial intelligence-based application of ICT for disease forecasting and large-scale decision planning.

Role: Co-Principal Investigator

Project Cost: Rs. 157.0 Lacs

Year of Award: Submitted in 2019

Funded by: Ministry of Health, Government of UP.

Status: Pending

7. **Project Topic:** AVIRAL (Academic Record Management of the Students)

Role: Co-Investigator

Project Cost: Rs. 87.03 Lacs

Year of Award: December 2017

Funded by: IIIT Allahabad, MoE, GoI.

Duration: 2 Years.

Status: Completed

8. Project Topic: Hindi to English Machine-Aided Translation in the Judicial Domain

Role: Co-Investigator

Project Cost: Rs. 9.10 Crores

Year of Award: November 2017

Funded by: TDIL, MeITY, GoI,

Duration: 5 Years.

Status: Completed

9. Project Topic: RFID-based Real-Time Traffic Management System using Internet-of-Things (IoT) Protocols

Role: Principal Investigator

Project Cost: Rs. 10 Lacs

Year of Award: 2016

Funded by: IIIT Allahabad, MHRD, GoI

Duration: 3 Years.

Status: Completed.

10. Project Topic: Road Roughness Analyzer using Internet-of-Things (IoT) Protocols

Role: Principal Investigator

Project Cost: Rs. 50,000/-

Year of Award: 2017

Funding Scheme: Concept to Prototype to Product Transformation

Funded by: DIC, MHRD, GoI.

Duration: 1 Years.

Status: Completed

11. Project Topic: Health Monitoring System using Internet-of-Things (IoT) Protocols

Role: Principal Investigator

Project Cost: Rs. 50,000/-

Year of Award: 2017

Funding Scheme: Concept to Prototype to Product Transformation

Funded by: DIC, MHRD, GoI.

Duration: 1 Years.

Status: Completed

12. Project Detail: IT/ITES implementation at IIIT Allahabad

Role: Member

Year: 2009

Funded by: MCIT, GoI

Duration: 3 Years.

Status: Completed

13. Project Detail: Education through ICT

Role: Member

Year: 2010

Funded by: AICTE, Govt. of India

Duration: 3 Years.

Status: Completed

PUBLICATION DETAILS

A. INTERNATIONAL JOURNALS

1. A. Gupta, Ritwik and V. K. Chaurasiya, "Adaptive Low-Latency Split Federated Learning with Dynamic Model Partitioning in Resource-Constrained Healthcare IoT," in *IEEE Transactions on Green Communications and Networking*, vol. 10, pp. 1308-1321, 2026, doi: 10.1109/TGCN.2025.3624654. [IF: 6.7]
2. Mishra, Sourav and Chaurasiya, Vijay Kumar, Secure Transactions in IoT Network Using PINN-Based Intrusion Detection System and HDPoA Blockchain Protocol, *Transactions on Emerging Telecommunications Technologies*, 36, 4, e70116, 2025. [IF: 2.5], DOI: <https://doi.org/10.1002/ett.70116>.
3. Ritesh Kumar, Joaquín Torres-Sospedra, Vijay Kumar Chaurasiya, H2LWRF-PDR: An efficient indoor positioning algorithm using a single Wi-Fi access point and Pedestrian Dead Reckoning, *Internet of Things*, Volume 27, 2024, 101271, ISSN 2542-6605, [IF: 7.6], DOI: <https://doi.org/10.1016/j.iot.2024.101271>.
4. A. Gupta, M. Kumar Maurya, K. Dhere, and V. Kumar Chaurasiya, "Privacy-Preserving Hybrid Federated Learning Framework for Mental Healthcare Applications: Clustered and Quantum

- Approaches," in *IEEE Access*, vol. 12, pp. 145054-145068, 2024, [IF: 3.6], DOI: 10.1109/ACCESS.2024.3464240.
5. Kumar, R., Panwar, R. & Chaurasiya, V.K. Urban traffic forecasting using an attention-based model with GCN and GRU. *Multimed Tools Appl***83**, 47751–47774 (2024), [IF: 3.6], <https://doi.org/10.1007/s11042-023-17248-y>.
 6. Gupta, A., Chaurasiya, V.K. Integrating Healthcare 4.0 and WBAN: efficient redundancy reduction and adaptive packet scheduling using AR-DRL. *J Supercomputing*, **80**, 8406–8433 (2024), [IF: 2.7], DOI: <https://doi.org/10.1007/s11227-023-05752-9>.
 7. Sahoo, S.S., Chaurasiya, V.K. EASB: ECC-based aggregate signature without bilinear pairing for blockchain. *Multimed Tools Appl***83**, 34581–34600 (2024), [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-17002-4>.
 8. Raut, A., Maurya, M.K., Chaurasiya, V.K. Adaptive hyperparameter optimization for short-term traffic flow prediction with spatial-temporal correlated raster data. *Evolving Systems***15**, 469–488 (2024), [IF: 2.7], DOI: <https://doi.org/10.1007/s12530-023-09513-0>.
 9. Mishra, S., Chaurasiya, V.K. Hybrid deep learning algorithm for smart cities security enhancement through blockchain and internet of things. *Multimed Tools Appl***83**, 22609–22637 (2024), [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-16406-6>.
 10. Sahoo, S.S., Menon, A.R. & Chaurasiya, V.K. Blockchain-Based n-party Virtual Payment Model with Concurrent Execution. *Arab J Sci Eng***49**, 3285–3312 (2024), [IF: 2.9], DOI: <https://doi.org/10.1007/s13369-023-07899-2>.
 11. Sahoo, S.S., Chaurasiya, V.K. *VIBE*: Blockchain-based Virtual Payment in IoT Ecosystem: A Secure Decentralized Marketplace. *Multimed Tools Appl***83**, 16869–16894 (2024), [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-15634-0>.
 12. Kumar, R., Sharma, N.V.K. & Chaurasiya, V.K. Adaptive traffic light control using deep reinforcement learning technique. *Multimed Tools Appl***83**, 13851–13872 (2024), [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-16112-3>.
 13. Sahoo, S.S., Chaurasiya, V.K. Proof of location-based delivery system using multi-party virtual state channel: a blockchain model. *J Supercomput***80**, 703–733 (2024), [IF: 2.7], DOI: <https://doi.org/10.1007/s11227-023-05510-x>.
 14. C. Maurya and V. K. Chaurasiya, "Efficient Anonymous Batch Authentication Scheme With Conditional Privacy in the Internet of Vehicles (IoV) Applications," in *IEEE Transactions on*

- Intelligent Transportation Systems*, vol. 24, no. 9, pp. 9670-9683, Sept. 2023, [IF: 8.4], DOI: doi: <https://doi.org/10.1109/TITS.2023.3271355>.
15. Gupta, A., Maurya, M.K., Goyal, N. ISTGCN: Integrated spatio-temporal modeling for traffic prediction using a traffic graph convolution network. *Appl Intell* **53**, 29153–29168 (2023), [IF: 3.5], DOI: <https://doi.org/10.1007/s10489-023-04976-9>.
 16. Gupta, A., Chaurasiya, V.K. QoS-supported redundancy-balanced data transmission scheme for wireless body area network-based H-IoT. *Wireless Netw* **29**, 3793–3808 (2023), [IF: 2.1], DOI: <https://doi.org/10.1007/s11276-023-03434-1>.
 17. Mishra, S., Chaurasiya, V.K. Blockchain and IoT-Based Infrastructure for Secure Smart City Using Deep Learning Algorithm with Dingo Optimization. *Wireless Pers Commun* **132**, 17–37 (2023), [IF: 2.2], DOI: <https://doi.org/10.1007/s11277-023-10560-8>.
 18. Raut, Ashwin; Shivhare, Anubhav; Chaurasiya, Vijay Kumar; Kumar, Manish; AEDS-IoT: Adaptive clustering-based Event Detection Scheme for IoT data streams, *Internet of Things*, 22, 00704, 2023, Elsevier, [IF: 5.9], DOI: <https://doi.org/10.1016/j.iot.2023.100704>
 19. Kumar, Ritesh; Singh, Sonakshi; Chaurasiya, Vijay Kumar, A Low-Cost and Efficient Spatial-Temporal Model for Indoor Localization H-LSTMF, *IEEE Sensors Journal*, 23, 6, 6117-6128, 2023, IEEE, [IF: 4.3], DOI: <https://doi.org/10.1109/JSEN.2023.3243621>
 20. Kumar, Ritesh; Mishra, Yogesh Chandra; Chaurasiya, Vijay Kumar, Route Planning Using Multicasting Approach in Vehicular Ad Hoc Networks, *Wireless Personal Communications*, 130, 3, 1795-1817, 2023, Springer US, [IF: 2.2], DOI: <https://doi.org/10.1007/s11277-023-10356-w>
 21. Maurya, Chanchal; Chaurasiya, Vijay Kumar, Collusion-resistant and privacy-preserving data sharing scheme on outsourced data in e-healthcare system, *Multimedia Tools and Applications*, 30-Jan, 2023, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-15006-8>
 22. Kumar, Ritesh; Kori, Nikhil; Chaurasiya, Vijay Kumar, Real-time data sharing, path planning and route optimization in urban traffic management, *Multimedia Tools and Applications*, 19-Jan, 2023, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-15148-9>.
 23. Sahoo, Sujit Sangram; Hosamane, Mahesh Mohan; Chaurasiya, Vijay Kumar; A secure payment channel rebalancing model for layer-2 blockchain, *Internet of Things*, 22, 100822, 2023, Elsevier, [IF: 5.9], DOI: <https://doi.org/10.1016/j.iot.2023.100822>.
 24. Maurya, Chanchal; Chaurasiya, Vijay Kumar, Efficient Anonymous Batch Authentication Scheme with Conditional Privacy in the Internet of Vehicles (IoV) Applications, *IEEE Transactions on Intelligent Transportation Systems*, 2023, IEEE, [IF: 8.5], DOI: <https://doi.org/10.1109/TITS.2023.3271355>.

25. Sahoo, Sujit Sangram; Menon, Aravind R; Chaurasiya, Vijay Kumar, Blockchain-Based n-party Virtual Payment Model with Concurrent Execution, *Arabian Journal for Science and Engineering*, 28-Jan, 2023, Springer Berlin Heidelberg Berlin/Heidelberg, [IF: 2.9], DOI: <https://doi.org/10.1007/s13369-023-07899-2>.
26. Sahoo, Sujit Sangram; Chaurasiya, Vijay Kumar, Proof of location-based delivery system using multi-party virtual state channel: a blockchain model, *The Journal of Supercomputing*, 31-Jan, 2023, Springer US New York, [IF: 3.3], DOI: <https://doi.org/10.1007/s11227-023-05510-x>.
27. Raut, Ashwin; Maurya, Manish Kumar; Chaurasiya, Vijay Kumar; Kumar, Manish, Adaptive hyperparameter optimization for short-term traffic flow prediction with spatial-temporal correlated raster data, *Evolving Systems*, 20-Jan, 2023, Springer Berlin Heidelberg Berlin/Heidelberg, [IF: 3.2], DOI: <https://doi.org/10.1007/s12530-023-09513-0>.
28. Kumar, Ritesh; Sharma, Nistala Venkata Kameshwer; Chaurasiya, Vijay K, Adaptive traffic light control using deep reinforcement learning technique, *Multimedia Tools and Applications*, 22-Jan, 2023, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-16112-3>.
29. Gupta, Arti; Chaurasiya, Vijay Kumar, Quality of service supported redundancy balanced data transmission scheme for wireless body area network-based H-IoT, *Wireless Networks*, 29, 8, 3793-3808, 2023, Springer US New York, [IF: 3.0], DOI: <https://doi.org/10.1007/s11276-023-03434-1>.
30. Sahoo, Sujit Sangram; Chaurasiya, Vijay Kumar, VIBE: blockchain-based virtual payment in IoT ecosystem: a secure decentralized marketplace, *Multimedia Tools and Applications*, 26-Jan, 2023, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-15634-0>.
31. Mishra, Sourav; Chaurasiya, Vijay Kumar, Hybrid deep learning algorithm for smart cities security enhancement through blockchain and Internet of Things, *Multimedia Tools and Applications*, 29-Jan, 2023, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-16406-6>.
32. Mishra, Sourav; Chaurasiya, Vijay Kumar, Blockchain and IoT-Based Infrastructure for Secure Smart City Using Deep Learning Algorithm with Dingo Optimization, *Wireless Personal Communications*, 21-Jan, 2023, Springer US New York, [IF: 2.2], DOI: <https://doi.org/10.1007/s11277-023-10560-8>.
33. Sahoo, Sujit Sangram; Chaurasiya, Vijay Kumar, EASB: ECC-based aggregate signature without bilinear pairing for blockchain, *Multimedia Tools and Applications*, 20-Jan, 2023, Springer US, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-023-17002-4>.
34. Singh, Sunakshi; Chaurasiya, Vijay Kumar, Mutual authentication framework using fog computing in healthcare, *Multimedia Tools and Applications*, 81, 22, 31977-32003, 2022, Springer US New York, [IF: 3.6], DOI: <https://doi.org/10.1007/s11042-022-12131-8>.

35. Singh, Sunakshi; Chaurasiya, Vijay Kumar, Mutual authentication scheme of IoT devices in fog computing environment, *Cluster Computing*, 24, 1643-1657, 2021, Springer US, [IF: 3.6], DOI: [IF: 4.4], DOI: <https://doi.org/10.1007/s10586-020-03211-1>.
36. Lal, Nidhi; Kumar, Shishupal; Chaurasiya, Vijay Kumar; A Road Monitoring Approach with Real-Time Capturing of Events for Efficient Vehicle Safety in Smart City, *Wireless Personal Communications*, 114, 1, 657-674, 2020, Springer US. [IF: 1.061].
37. Singh, Sunakshi; Chaurasiya, Vijay Kumar; A Mutual Authentication Scheme for IoT Devices in Fog Computing Environments, *Cluster Computing*, January 15, 2020, Springer US. [IF:3.548]
38. Lal, N., Kumar, S. & Chaurasiya, V.K. A Network-Coded Caching-Based Multicasting Scheme for Information-Centric Networking (ICN). *Iran J Sci Technol Trans Electr Eng* 43, 427-438 (2019). <https://doi.org/10.1007/s40998-018-0171-4>. [IF: 0.657].
39. Lal, Nidhi; Kumar, Shishupal; Chaurasiya, Vijay Kumar; An adaptive neuro-fuzzy inference system-based caching scheme for content-centric networking, *Soft Computing*, 23, 12, 4459 - 4470, 2019, Springer Berlin Heidelberg. [IF: 3.050].
40. Lal, Nidhi; Kumar, Shishupal; Kadian, Garima; Chaurasiya, Vijay Kumar; Caching Methodologies in Content-Centric Networking (CCN): A Survey, *Computer Science Review*, 31, 39-50, 2019, Elsevier. [IF: 7.707].
41. Lal, Nidhi; Kumar, Shishupal; Chaurasiya, Vijay Kumar; An efficient update strategy for content synchronization in content-centric networking (CCN), *China Communications*, 16, 1, 108-118, 2019, IEEE. [IF: 2.024].
42. Kumar, Shishupal; Lal, Nidhi; Chaurasiya, Vijay Kumar; An energy-efficient IPv6 packet delivery scheme for industrial IoT over G. 9959 protocol-based wireless sensor network (WSN), *Computer Networks*, 154, 79-87, 2019, Elsevier. (IF: 3.1).
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C. BOOK CHAPTERS

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