

List of Publications

International Journals:

1. Devesh Shukla, **Arun Prakash** and Rajeev Tripathi, "Channel Estimation Enhancement in Vehicular Communication using Deep Neural Network," *Sādhanā, Springer*, vol. 50, Jan. 2025, DoI: <https://doi.org/10.1007/s12046-024-02659-w> (I.F. - 1.4).
2. A. Srivastava, R. Pal, **A. Prakash**, R. Tripathi, N. Gupta and A. Alkhayyat, "Energy-Efficient Channel Selection Algorithm with Reduced Collision Probability in Cognitive Radio Networks," *Internet Technology Letters, Wiley, (Special Issue on Survivability Techniques for 6G Wireless Networks)*, Sep. 2024, DoI: <https://doi.org/10.1002/itl2.581> (I.F. - 0.9)
3. A. Srivastava, R. Pal, **A. Prakash**, R. Tripathi, N. Gupta and A. Alkhayyat, "Optimal Channel Selection and Switching Using Q-Learning in Cognitive Radio Ad Hoc Networks," *IEEE Transactions on Consumer Electronics*, (Special Section on "Performance Evaluation Techniques for Next-Generation Wireless Networks"), vol. 70, issue 3, pp. 6314-6326, August 2024, DoI: 10.1109/TCE.2024.3413333. (I.F. - 4.3)
4. J. Tiwari, **A. Prakash** and R. Tripathi "A Metaheuristic MAC Protocol for Safety Applications in Cognitive Vehicular Networks," *Vehicular Communications*, Elsevier, Vol. 44, Dec. 2023, DoI: <https://doi.org/10.1016/j.vehcom.2023.100686>. (I.F. - 5.8)
5. A. Kaur, K. Kumar, **A. Prakash** and R. Tripathi "Imperfect CSI based Resource Management in Cognitive IoT Networks: A Deep Recurrent Reinforcement Learning Framework," *IEEE Transactions on Cognitive Communications and Networking*, vol. 9, no. 5, pp. 1271-1281, Oct. 2023, DoI: 10.1109/TCCN.2023.3271144. (I.F. - 7.4)
6. A. Kaur, J. Thakur, M. Thakur, K. Kumar, **A. Prakash** and R. Tripathi "Deep Recurrent Reinforcement Learning based Distributed Dynamic Spectrum Access in Multichannel Wireless Networks with Imperfect Feedback," *IEEE Transactions on Cognitive Communications and Networking*, Vol. 9, Issue 2, April 2023, DoI: 10.1109/TCCN.2023.3234276. (I.F. - 7.4)
7. Jahnvi Tiwari, **Arun Prakash**, Rajeev Tripathi, and Kshirasagar Naik "An Adaptive and Cooperative MAC Protocol for Safety Applications in Cognitive Radio Enabled Vehicular Ad-hoc Networks," *Ad Hoc Networks*, Elsevier, October 2022, DoI: <https://doi.org/10.1016/j.adhoc.2022.103019>. (I.F. - 4.8)
8. Ankita Srivastava, **Arun Prakash**, and Rajeev Tripathi, "QoS Aware Stochastic Relaxation Approach in Multichannel CR-VANET: A Junction-Centric Geographic Routing Protocol," *Journal of Ambient Intelligence and Humanized Computing*, Springer, September 2022, DOI: <https://doi.org/10.1007/s12652-022-04391-x>. (I.F. - 3.6)
9. Jahnvi Tiwari, **Arun Prakash**, Rajeev Tripathi, and Kshirasagar Naik "A Fair and Cooperative MAC Protocol for Heterogeneous Cognitive Radio Enabled Vehicular Ad-hoc Networks," *IEEE Transactions on Cognitive Communications and Networking*, Vol. 8, Issue 2, June 2022, DoI: 10.1109/TCCN.2022.3168673. (I.F. - 7.4)
10. Jahnvi Tiwari, Madhuri Purna, **Arun Prakash** and Rajeev Tripathi, "A Hybrid Spatially-Distributed Multichannel MAC for VANET," *International Journal of Electronics*, Taylor and Francis, May 2022, DoI: <https://doi.org/10.1080/00207217.2022.2068197>. (I.F. - 1.3)

11. Ankita Srivastava, **Arun Prakash**, and Rajeev Tripathi, "A Cross-Layer based Cooperative Broadcast Protocol for Multichannel VANET," *Ad Hoc Networks, Elsevier*, Vol. 131, June 2022, DOI: <https://doi.org/10.1016/j.adhoc.2022.102840>. (I.F. – 4.8)
12. Vinay Kumar, Sadanand Yadav, Anand Sharma, **Arun Prakash**, Rajeev Tripathi and Dushantha Nalin K. Jayakody, "3D-multilayer magneto-inductive transceiver coil structure and optimal placement of relays for non-conventional media," *Wireless Networks, Springer*, April 2022, Dol: <https://doi.org/10.1007/s11276-022-02949-3>. (I.F. – 3.0)
13. Yogesh Tripathi, **Arun Prakash**, and Rajeev Tripathi, "A Novel Slot Scheduling Technique for Duty Cycle based Data Transmission for Wireless Sensor Network," *Digital Communication and Networks, Elsevier*, Feb. 2022, Dol: <https://doi.org/10.1016/j.dcan.2022.01.006>. (I.F. – 7.9)
14. Yogesh Tripathi, **Arun Prakash**, and Rajeev Tripathi, "Load aware multipath data forwarding for enhanced lifetime of WSN", *International Journal of Information Technology, Springer*, Vol. 13, Jan. 2022, pp. 807-815 Dol: <https://doi.org/10.1007/s41870-020-00557-y>. (Scopus indexed)
15. Devesh Shukla, **Arun Prakash**, and Rajeev Tripathi, "Adaptive Modulation and Coding for Performance Enhancement of Vehicular Communication," *Wireless Personal Communications, Springer*, Sep. 2021, DOI: <https://doi.org/10.1007/s11277-021-09125-4>. (I.F. – 2.2)
16. Devesh Shukla, **Arun Prakash**, and Rajeev Tripathi, "Curve Fitting Optimization based Improved Channel Estimation for VANET," *International Journal of Electronics, Taylor and Francis*, Dec. 2021, Dol: <https://doi.org/10.1080/00207217.2021.2001874>. (I.F. – 1.3)
17. Yogesh Tripathi, **Arun Prakash** and Rajeev Tripathi, "A Sleep Scheduling based Cooperative data Transmission Approach for Wireless Sensor Network", *International Journal of Electronics, Taylor and Francis*, April 2021, DOI: 10.1080/00207217.2021.1914193. (I.F. – 1.3)
18. Jahnvi Tiwari, **Arun Prakash** and Rajeev Tripathi, "A Novel Cooperative MAC Protocol for Safety Applications in Cognitive Radio Enabled Vehicular Ad hoc Networks," *Vehicular Communications, Elsevier*, Vol. 29, June 2021, DOI: <https://doi.org/10.1016/j.vehcom.2021.100336>. (I.F. – 5.8)
19. Raghavendra Pal, Nishu Gupta, **Arun Prakash**, Rajeev Tripathi and Joel J. Rodrigues "Deep Reinforcement Learning based Optimal Channel Selection for Cognitive Radio VANET," *IET Communications*, Oct. 2020, DOI: 10.1049/iet-com.2020.0451. (I.F. – 1.6)
20. Ankita Srivastava, **Arun Prakash**, and Rajeev Tripathi, "Fuzzy-based Beaconless Probabilistic Broadcasting for Information Dissemination in Urban VANET," *Ad Hoc Networks, Elsevier*, Vol. 108, Nov. 2020, DOI: <https://doi.org/10.1016/j.adhoc.2020.102285>. (I.F. – 4.8)
21. Yogesh Tripathi, **Arun Prakash**, and Rajeev Tripathi, "An Optimum Transmission Distance and Adaptive Clustering based Routing Protocol for Cognitive Radio Sensor Network," *Wireless Personal Communications, Springer*, August 2020, DOI: <https://doi.org/10.1007/s11277-020-07745-w>. (I.F. – 2.2)
22. Raghavendra Pal, Arun Prakash, Rajeev Tripathi, and Kshirasagar Naik "Regional Super Cluster based Optimum Channel Selection for CR-VANET," *IEEE Transactions on Cognitive Communications and Networking*, Vol. 6, No. 2, June 2020, pp. 607-617, DOI: <https://doi.org/10.1109/TCCN.2019.2960683>. (I.F. – 7.4)
23. Ankita Srivastava, **Arun Prakash**, and Rajeev Tripathi, "An Adaptive Intersection Selection Mechanism using Ant Colony Optimization for Efficient Data Dissemination in Urban VANET," *Peer-*

- to-Peer Networking and Applications*, Springer, 2020, DOI: <https://doi.org/10.1007/s12083-020-00892-8>. (I.F. – 4.2)
24. Ankita Srivastava, **Arun Prakash**, and Rajeev Tripathi, "Location based Routing Protocols in VANET: Issues and Existing Solutions," *Vehicular Communications, Elsevier*, Vol. 23, 2020, pp. 14–22, DOI: <https://doi.org/10.1016/j.vehcom.2020.100231>. (I.F. – 6.7)
 25. Raghavendra Pal, **Arun Prakash**, Rajeev Tripathi, and Kshirasagar Naik "A Scheduling Algorithm based on Preemptive Priority and Hybrid Data Structure for CR-VANET," *IET Communications*, Vol. 13, Issue 20, 2019, pp.3443-3451, DOI: 10.1049/iet-com.2019.0574 (I.F. – 1.6)
 26. Brijesh Kumar Chaurasia., Iftekar Alam, **Arun Prakash**, Ranjeet Singh Tomar, Shekhar Verma, "MPMAC: Clustering Based MAC Protocol for VANETs", *Wireless Personal Communications, Springer*, Vol. 108, Issue 1, 2019, pp. 409-436, DOI: <https://doi.org/10.1007/s11277-019-06409-8>. (I.F. – 2.2)
 27. Asad Rashid, Yogesh Tripathi, **Arun Prakash**, and Rajeev Tripathi, "Load aware energy balanced data gathering approach in cognitive radio sensor networks", *IET Wireless Sensor Systems*, Volume 9, Issue 3, 2019, p. 143 – 150, DOI: 10.1049/iet-wss.2018.5101. (I.F. – 1.9)
 28. Vinay Kumar, Rutuja Bhusari, Sanjay B. Dhok, **Arun Prakash**, Rajeev Tripathi, and Sudarshan Tiwari, "Design of Magnetic Induction based Energy Efficient WSNs for Non-Conventional Media using Multilayer Transmitter Enabled Novel Energy Model," *IEEE Systems Journal*, Volume: 13, Issue: 2, 2019, pp. 1285-1296, DOI: 10.1109/JSYST.2018.2852487. (I.F. – 4.4)
 29. Raghavendra Pal, **Arun Prakash**, Rajeev Tripathi, and Dhananjay Singh "Analytical model for analysis of clustered Vehicular Ad hoc Network," *ICT Express, Elsevier*, Vol. 4, Issue 3, 2018, pp. 160-164, DOI: <https://doi.org/10.1016/j.ict.2018.01.001>. (I.F. - 5.4)
 30. Raghavendra Pal, **Arun Prakash**, and Rajeev Tripathi, "Triggered CCHI Multichannel MAC protocol for Vehicular Ad Hoc Networks," *Vehicular Communications, Elsevier*, Vol. 12, 2018, pp. 14–22, DOI: <https://doi.org/10.1016/j.vehcom.2018.01.007>. (I.F. – 6.7)
 31. Raghavendra Pal, Nishu Gupta, **Arun Prakash**, and Rajeev Tripathi, "Adaptive Mobility and Range Based Clustering Dependent MAC Protocol for Vehicular Ad-hoc Networks," *Wireless Personal Communications, Springer*, Volume 98, 2018, pp. 1155-1170, DOI: <https://doi.org/10.1007/s11277-017-4913-9>. (I.F. – 2.2)
 32. Zain Hashim, Nishu Gupta, **Arun Prakash**, and Rajeev Tripathi, "Dual-Band UWB Bandpass Filter with Triangular DB-DGS for WLAN Applications in DSRC Band," *AEU - International Journal of Electronics and Communications, Elsevier*, Volume 86, 2018, pp. 77-85, DOI: <https://doi.org/10.1016/j.aeue.2018.01.026>. (I.F. – 3.2)
 33. Pawan Kumar Verma, Rajesh Verma, **Arun Prakash**, Mohammad Meftah Alrayes, Rajeev Tripathi, and Kshirasagar Naik, "A Novel Energy Efficient and Scalable Hybrid-MAC Protocol for Massive M2M Networks," *Cluster Computing, Springer*, Volume 22, 2018, pp. 8703-8724, DOI: <https://doi.org/10.1007/s10586-018-1948-y>. (I.F. – 4.4)
 34. Nand Kishore, Gaurav Upadhyay, Vijay Shanker Tripathi, and **Arun Prakash**, "Dual Band Rectangular Patch Antenna Array With Defected Ground Structure For ITS Application," *AEU - International Journal of Electronics and Communications, Elsevier*, Volume 96, 2018, pp. 228-237, DOI: <https://doi.org/10.1016/j.aeue.2018.09.039>. (I.F. – 3.2)

35. Pant Varun Prakash, Saumya Tripathi, Raghavendra Pal, and **Arun Prakash**, "A Slotted Multichannel MAC Protocol for Fair Resource Allocation in VANET," *International Journal of Mobile Computing and Multimedia Communications*, IGI Global, Vol. 9, Issue 3, 2018, pp.45--59, DOI: 10.4018/IJMCMC.2018070103. (I.F. – 0.6)
36. Nand Kishore, Gaurav Upadhyay, **Arun Prakash**, Vijay Shanker Tripathi, "Millimeter Wave Antenna for Intelligent Transportation Systems Applications", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, Volume 17, No. 1, 2018 DOI: <http://dx.doi.org/10.1590/2179-10742018v17i11146> (I.F. - 0.26)
37. Krishan Kumar, **Arun Prakash** and Rajeev Tripathi, "A Spectrum Handoff Scheme for Optimal Network Selection in Cognitive Radio Vehicular Networks: A Game Theoretic Auction Theory Approach," *Physical Communication*, Elsevier, Vol. 24, 2017, pp. 19-33, DOI: <https://doi.org/10.1016/j.phycom.2017.04.001> (I.F. – 2.2)
38. Krishan Kumar, **Arun Prakash** and Rajeev Tripathi, "Spectrum Handoff Scheme with Multiple Attributes Decision Making for Optimal Network Selection in Cognitive Radio Networks," *Digital Communications and Networks*, Elsevier, Vol. 3, Issue 3, 2017, pp. 164-175, DOI: <http://dx.doi.org/10.1016/j.dcan.2017.01.003>. (I.F. – 7.9)
39. Krishan Kumar, Ganesh Prasad Mishra, **Arun Prakash** and Rajeev Tripathi, "A Proactive Spectrum Handoff Scheme with Efficient Spectrum Utilization for Cognitive Radio Ad hoc Networks," *International Journal of Internet Protocol Technology*, Inderscience, Vol. 10, Issue 3, 2017, pp. 160-176, DOI: <https://doi.org/10.1504/IJIPT.2017.087550>. (I.F. – 0.4)
40. Nishu Gupta, Arun Prakash, and Rajeev Tripathi, "Mobility dependent clustering-based data transmission under variable data rate for different node densities in vehicular ad hoc network," *Int. J. of Advanced Intelligence Paradigms*, Inderscience, Volume 9, No. 2-3, 2017, pp. 246-262, DOI: 10.1504/IJAIP.2017.082986. (Scopus)
41. Nishu Gupta, **Arun Prakash** and Rajeev Tripathi, "Adaptive Beaconing in Mobility Aware Clustering Based MAC Protocol for Safety Message Dissemination in VANET," *Wireless Communication and Mobile Computing*, Hindawi and Wiley, Volume 2017, Article ID 1246172, 15 pages, DOI: <https://doi.org/10.1155/2017/1246172>. (I.F. – 2.1)
42. Krishan Kumar, **Arun Prakash** and Rajeev Tripathi, "A Spectrum handoff scheme for optimal network selection in NEMO based cognitive radio vehicular networks," *Wireless Communication and Mobile Computing*, Hindawi and Wiley, Volume 2017, Article ID 6528457, 16 pages, DOI: <https://doi.org/10.1155/2017/6528457>. (I.F. – 2.1)
43. Nishu Gupta, **Arun Prakash**, and Rajeev Tripathi, "Clustering based Enhanced Safety message Dissemination Medium Access Control Protocol for Vehicular Ad Hoc Network," *Int. J. of Ad Hoc and Ubiquitous Computing*, Inderscience, Volume 24, No. 1/2, 2017, pp. 76-89, DOI: 10.1504/IJAHUC.2017.10001715. (I.F. – 0.7)
44. Nand Kishore, **Arun Prakash**, and V.S. Tripathi, "A Reconfigurable Ultra Wide Band Antenna With Defected Ground Structure For ITS Application," *AEU - International Journal of Electronics and Communications*, Elsevier, Volume 72, 2017, pp. 210-215, DOI: <http://dx.doi.org/10.1016/j.aee.2016.12.009>. (I.F. – 3.2)

45. Krishan Kumar, **Arun Prakash** and Rajeev Tripathi, "Context aware Spectrum Handoff Scheme in Cognitive Radio Vehicular Networks," *Int. J. of Ad Hoc and Ubiquitous Computing, Inderscience*, Volume 24, No. 1/2, 2017, pp. 101-116, DOI: 10.1504/IJAHUC.2017.10001715. (I.F. – 0.7)
46. Nishu Gupta, **Arun Prakash**, and Rajeev Tripathi, "Clustering based Cognitive MAC Protocol for Channel Allocation to Prioritize Safety Message Dissemination in Vehicular Ad-hoc Network," *Vehicular Communications, Elsevier* Volume 5, 2016, pp. 44-54, DOI: <http://dx.doi.org/10.1016/j.vehcom.2016.09.004>. (I.F. – 6.7)
47. Nand Kishore, **Arun Prakash**, and V.S. Tripathi, "A Multiband Microstrip Patch Antenna with Defected Ground Structure for ITS Applications", *Microwave and Optical Technology Letters, Wiley*, Volume 58, No. 12, 2016, pp. 2814-2818, DOI: 10.1002/mop.30151. (I.F. – 1.5)
48. Pawan Kumar Verma, Rajesh Verma, **Arun Prakash**, Kshirasagar Naik, and Rajeev Tripathi "A Novel Hybrid Medium Access Control Protocol for Inter-M2M Communications," *Journal of Network and Computer Applications, Elsevier*, Volume 75, 2016, pp. 77-88, DOI: <http://dx.doi.org/10.1016/j.jnca.2016.08.011> (I.F. – 8.7)
49. Pawan Kumar Verma, Rajesh Verma, **Arun Prakash**, Ashish Agrawal, Kshirasagar Naik, Rajeev Tripathi, Maazen Alsabaan, Tarek Khalifa, Tamer Abdelkader, and Abdulhakim Aboghara, "Machine-to-Machine (M2M) Communications: A Survey," *Journal of Network and Computer Applications, Elsevier*, Vol. 66, 2016, pp. 83–105, DOI:10.1016/j.jnca.2016.02.016. (I.F. – 8.7)
50. Krishan Kumar, **Arun Prakash** and Rajeev Tripathi, "Spectrum Handoff in Cognitive Radio Networks: A Classification and Comprehensive Survey," *Journal of Network and Computer Applications, Elsevier*, Vol. 61, 2016, pp. 161–188, DOI: 10.1016/j.jnca.2015.10.008. (I.F. – 8.7)
51. Alka Verma, **Arun Prakash** and Rajeev Tripathi, "Comparative study of Surface Plasmon Resonance Biosensor based on Metamaterial and Graphene", *Silicon, Springer*, 2016, pp. 1-12, DOI: 10.1007/s12633-016-9455-3. (I.F. – 3.4)
52. Alka Verma, **Arun Prakash** and Rajeev Tripathi, "Sensitivity improvement of graphene based surface plasmon resonance biosensors with chalcogenide prism," *Optik - International Journal for Light and Electron Optics, Elsevier*, Vol. 127, Issue 4, 2016, pp. 1787–1791, DOI: 10.1016/j.ijleo.2015.11.083. (I.F. – 3.1)
53. Pawan Kumar Verma, Rajesh Verma, **Arun Prakash**, and Rajeev Tripathi, "Throughput-Delay Evaluation of a Hybrid-MAC Protocol for M2M Communications," *International Journal of Mobile Computing and Multimedia Communications, IGI Global*, Vol. 7, Issue 1, 2016 pp.41–60, DOI: 10.4018/IJMCMC.2016010104. (I.F. – 0.6)
54. Nishu Gupta, **Arun Prakash**, and Rajeev Tripathi, "Medium Access Control Protocols for Safety Applications in Vehicular Ad-Hoc Network: A Classification and Comprehensive Survey," *Vehicular Communications, Elsevier*, Vol. 2, Issue 4, 2015, pp. 223–237, DOI: 10.1016/j.vehcom.2015.10.001. (I.F. – 5.8)
55. Alka Verma, **Arun Prakash** and Rajeev Tripathi, "Sensitivity enhancement of Surface Plasmon Resonance Biosensor using Graphene and Air gap," *Optics communications, Elsevier*, Vol. 357, 2015, pp. 106-112, DOI: 10.1016/j.optcom.2015.08.076. (I.F. – 2.4)
56. Alka Verma, **Arun Prakash** and Rajeev Tripathi, "Performance Analysis of Graphene based Surface Plasmon Resonance Biosensors for Detection of Pseudomonas-like Bacteria," *Optical and Quantum*

- Electronics, Springer*, Vol. 47, Issue 5, 2014, pp. 1197-1205, DOI: 10.1007/s11082-014-9976-1. (I.F. – 3.0)
57. **Arun Prakash**, Rajesh Verma, Rajeev Tripathi, and Kshirasagar Naik, "A Seamless handover Scheme for Vehicles across Heterogeneous Networks," *International Journal of Communication Networks and Distributed Systems, Inderscience*, Vol. 8, Nos. 1/2, 2012, pp. 4-23, DOI: 10.1504/IJCND.2012.044320. (I.F. – 1.3)
 58. **Arun Prakash**, Sarsij Tripathi, Rajesh Verma, Neeraj Tyagi, Rajeev Tripathi, and Kshirasagar Naik, "Vehicle Assisted Cross layer handover scheme in NEMO based VANETs (VANEMO)," *International Journal of Internet Protocol Technology, Inderscience*, Vol. 6, Nos. 1/2, 2011, pp. 83–95, DOI: 10.1504/IJIPT.2011.040617. (I.F. – 0.4)
 59. **Arun Prakash**, Rajesh Verma, Rajeev Tripathi, and Kshirasagar Naik, "Extended Mobile IPv6 Route Optimization for Mobile Networks in Local and Global Mobility Domain," *International Journal of Mobile Computing and Multimedia Communications, IGI Global*, Vol. 2, Issue 2, 2010, pp.1–7, DOI: 10.4018/jmcmc.2010040101. (I.F. – 0.6)
 60. Rajesh Verma, **Arun Prakash**, Rajeev Tripathi, and Neeraj Tyagi, "Improving Throughput of Starved TCP Flow by Sidestepping Bottleneck Nodes Using Concurrent Transmission," *International Journal of Mobile Computing and Multimedia Communications, IGI Global*, Vol. 2, Issue 1, 2010, pp.68–83, DOI: 10.4018/jmcmc.2010103004. (I.F. – 0.6)

Books Edited / Book chapters published

1. Edited the Proceedings of 5th International Conference on Emerging Technology Trends in Electronics, Communication and Networking – ET2ECN 2026, Published by LNEE, Springer, Nov. 2026, ISBN: 978-981-92-4242-9
2. Contributed a book chapter titled "C-V2X: Future of Vehicular Communications toward Sustainable Development," in the edited book titled "Cellular Communication System - The Evolution from 1G to 6G," Published by 'IntechOpen Limited' (15 July 2026), DOI: 10.5772/intechopen.1015821.
3. Contributed a book chapter titled "Computational Intelligence in MAC Layer Protocols of mmWave (5G and Beyond) V2X Communication," Published by 'CRC Press - Taylor & Francis' (Nov. 2023), pp. 67-79, eBook ISBN: 9781003452645, DOI: <https://doi.org/10.1201/9781003452645>.
4. Co-authored and edited a book titled "Internet of Vehicles and its Applications in Autonomous Driving", Published by 'Springer' (September 2020), ISBN: 978-3-030-46335-9, DOI: 10.1007/978-3-030-46335-9.
5. Contributed a book chapter titled "Medium access control in connected vehicles: Advances and Limitations" in "Internet of Vehicles and its Applications in Autonomous Driving," Published by 'Springer' (September 2020), pp. 133-157, ISBN: 978-3-030-46334-2, DOI: https://doi.org/10.1007/978-3-030-46335-9_5.
6. Contributed a book chapter titled "Massive Access Control in Machine-to-Machine Communications" in "Algorithms, Methods, and Applications in Mobile Computing and Communications," Published by 'IGI Global' (2018), pp. 133-157, DOI: 10.4018/978-1-5225-5693-0.ch006.
7. Contributed a book chapter titled "Improving Throughput of Starved TCP Flow by Sidestepping Bottleneck Nodes Using Concurrent Transmission" in "Advancing the Next-Generation of Mobile

Computing: Emerging Technologies,” Published by ‘IGI Global’ (2012), pp. 47-60, DOI: 10.4018/978-1-4666-0119-2.ch004.

8. Contributed a book chapter titled “Extended Mobile IPv6 Route Optimization for Mobile Networks in Local and Global Mobility Domain” in “Advancing the Next-Generation of Mobile Computing: Emerging Technologies,” Published by ‘IGI Global’ (2012), pp.183-197, DOI: 10.4018/978-1-4666-0119-2.ch012.

International Conferences

1. Vinay Kumar, Raghavendra Pal, and **Arun Prakash**, “A Comparative Technical Analysis of IEEE 802.11p and IEEE 802.11bd for Vehicular Communication System”, 2nd International Conference on Integrated Circuits, Communication, and Computing Systems (ICIC3S-2026), IIIT Una, 7-8 Aug. 2026.
2. Sindhu Sujata Kandu, **Arun Prakash**, Manish Tiwari, Sarsij Tripathi, Nishu Gupta and Raghavendra Pal, “Comparative Performance Analysis of SPS and Dynamic Scheduling in 5G NR V2X Mode 2 for Safety Traffic”, 2nd International Conference on Integrated Circuits, Communication, and Computing Systems (ICIC3S-2026), IIIT Una, 7-8 Aug. 2026.
3. Arnav Agrawal, Sarsij Tripathi, Raghavendra Pal, and **Arun Prakash**, “Testbed Implementation for Performance Evaluation of Contention Based MAC Protocols”, 2025 13th International Conference on Intelligent Embedded, MicroElectronics, Communication and Optical Networks (IEMECON), Dec. 08-10, 2025, Jaipur, Dol: 10.1109/IEMECON69302.2025.11365776 (*IEEE Xplore*).
4. Sindhu Sujata Kandu, **Arun Prakash**, Manish Tiwari, Sarsij Tripathi, Nishu Gupta and Raghavendra Pal, “C-V2X and 5G-V2X: Challenges and Improvement Strategies”, Third International Conference on Microwave, Antenna and Communication (MAC), Bhopal, India, 27-29 June 2025, pp. 1-6, Dol: 10.1109/MAC64480.2025.11140108 (*IEEE Xplore*).
5. Devesh Shukla, Yogesh Tripathi, **Arun Prakash** and Rajeev Tripathi, “Deep Neural Network based Channel Estimation in VANET”, 12th International Conference on the Internet of Everything, Microwave, Embedded, Communication, and Networks, October 24-26, 2024, Jaipur, Dol: 10.1109/IEMECON62401.2024.10846318 (*IEEE Xplore*).
6. N. Gupta, J. Mäkelä, M. Uitto, and **A. Prakash**, “Channel Prediction for Resource Allocation in 5G Massive Machine-Type Communications Using Graph Neural Network”, VCAS 2024, Oct. 25-27, 2024, MNIIT Allahabad, Dol: https://doi.org/10.1007/978-981-95-0203-5_9 (*LNEE Springer*).
7. Tanupriya, **Arun Prakash** and Sourajit Jashi, “Scrambler Optimization with Reduced Cycles and Speed Enhancement Technique”, 12th International Conference on the Internet of Everything, Microwave, Embedded, Communication, and Networks, October 24-26, 2024, Jaipur, Dol: 10.1109/IEMECON62401.2024.10846214 (*IEEE Xplore*).
8. Richa Singh and **Arun Prakash**, “Analysis and Comparison of Static and Dynamic Power Dissipation for Various Arbitration Schemes Used in NoC Routers”, 12th International Conference on the Internet of Everything, Microwave, Embedded, Communication, and Networks, October 24-26, 2024, Jaipur, Dol: 10.1109/IEMECON62401.2024.10846086 (*IEEE Xplore*).
9. Sweta Singh, **Arun Prakash**, Rudra Caculo and Rajeev Tripathi, “Design of Dual Band WiFi PCB Antenna”, IEEE MAC 2024, October 04-06, 2024, Dehradun, Dol: 10.1109/MAC61551.2024.10837122 (*IEEE Xplore*).

10. Aakash Jasper, **Arun Prakash**, Sara Paiva and Raghavendra Pal, "Performance analysis of a novel MAC protocol in mmWave V2X network for the safety application in Outdoor Parking Lot", IEEE MAC 2023, March 24-26, 2023, MNIIT Allahabad (*IEEE Xplore*).
11. Jahnvi Tiwari, Dheeraj Dubey, **Arun Prakash** and Rajeev Tripathi, "A Trustworthy and Cooperative MAC Protocol for Cognitive Vehicular Networks", 2022 IEEE 9th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), IIIT Allahabad, DOI: 10.1109/UPCON56432.2022.9986422 (*IEEE Xplore*).
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