## 1 List of publications by Dr. Prateek Raj Gautam

## 1.1 Journals

- [J1] P. R. Gautam, S. Kumar, A. Verma, T. Rashid, et al., "Energy-efficient localization of sensor nodes in WSNs using beacons from rotating directional antenna," IEEE Transactions on Industrial Informatics, vol. 15, no. 11, pp. 5827–5836, Nov. 2019. DOI: 10.1109/tii.2019.2908437 issn 1551-3203 Impact Factor: 12.3
  SCIE, O1
- [J2] P. R. Gautam, S. Kumar, A. Verma, and A. Kumar, "Energy-efficient localization of sensor nodes in wsns using single beacon node," *IET Communications*, vol. 14, no. 9, pp. 1459–1466, 2020. DOI: 10.1049/iet-com.2019.1298 issn 1751-8628 Impact Factor: 1.6

  SCIE, Q2
- [J3] A. Verma, S. Kumar, P. R. Gautam, and A. Kumar, "Fuzzy logic based effective clustering of homogeneous wireless sensor networks for mobile sink," IEEE Sensors Journal, vol. 20, no. 10, pp. 5615–5623, May 2020. DOI: 10.1109/jsen.2020.2969697 issn 1530-437X Impact Factor: 4.3 SCIE, Q1
- [J4] A. Verma, S. Kumar, P. R. Gautam, and A. Kumar, "Neural-fuzzy based effective clustering for large-scale wireless sensor networks with mobile sink," Peer-to-Peer Networking and Applications, Jun. 2021. DOI: 10.1007/s12083-021-01167-6 issn 1936-6450 Impact Factor: 4.2 SCIE, Q2
- [J5] A. Verma, S. Kumar, P. R. Gautam, T. Rashid, et al., "Broadcast and reliable coverage based efficient recursive routing in large-scale wsns," *Telecommunication Systems*, vol. 75, no. 1, pp. 63–78, Jun. 2020. DOI: 10.1007/s11235-020-00679-5 issn 1572-9451 Impact Factor: 2.5 SCIE, Q2
- [J6] M. Yadav, P. R. Gautam, V. Shokeen, and P. K. Singhal, "Modern fisher-yates shuffling based random interleaver design for SCFDMA-IDMA systems," Wireless Personal Communications, vol. 97, no. 1, pp. 63–73, May 2017. DOI: 10.1007/s11277-017-4492-9 issn 0929-6212 Impact Factor: 2.2 SCIE, Q2
- [J7] A. Verma, T. Rashid, P. R. Gautam, S. Kumar, et al., "Cost and sub-epoch based stable energy-efficient clustering algorithm for heterogeneous wireless sensor networks," Wireless Personal Communications, vol. 107, no. 4, pp. 1865–1879, Apr. 2019. DOI: 10.1007/s11277-019-06362-6 issn 0929-6212

  Impact Factor: 2.2

  SCIE, Q2
- [J8] T. Rashid, S. Kumar, A. Verma, P. R. Gautam, et al., "Co-reerp: Cooperative reliable and energy efficient routing protocol for intra body sensor network (intra-wbsn)," Wireless Personal Communications, vol. 114, no. 2, pp. 927–948, Apr. 2020. DOI: 10.1007/s11277-020-07401-3 issn 0929-6212 Impact Factor: 2.2
- [J9] S. Kumar, P. R. Gautam, A. Verma, T. Rashid, et al., "An energy-efficient transmission in wsns for different climatic conditions," Wireless Personal Communications, vol. 110, no. 1, pp. 423–444, Sep. 2019. DOI: 10.1007/s11277-019-06735-x issn 0929-6212 Impact Factor: 2.2 SCIE, Q2
- [J10] S. Kumar, P. R. Gautam, T. Rashid, A. Verma, et al., "Division algorithm based energy-efficient routing in wireless sensor networks," Wireless Personal Communications, Aug. 2021. DOI: 10.1007/s11277-021-08996-x issn 1572-834X Impact Factor: 2.2
  SCIE, Q2
- [J11] Shilpi, P. R. Gautam, S. Kumar, and A. Kumar, "An optimized sensor node localization approach for wireless sensor networks using rssi," *The Journal of Supercomputing*, vol. 79, pp. 2335–2354, 2022. DOI: https://doi.org/10.1007/s11227-022-04971-w issn 0920-8542 Impact Factor: 3.3 SCIE, Q2
- [J12] R. C. S. Chauhan, A. Kumar, and P. R. Gautam, "Optical orthogonal code generation scheme and grouping of codes for optical CDMA systems," International Journal of System Assurance Engineering and Management, vol. 12, no. 1, pp. 91–103, 1 Jun. 2020. DOI: 10.1007/s13198-020-01007-5 issn 0976-4348

  ESCI, 0.52
- [J13] P. R. Gautam, A. Verma, S. Kumar, D. Prasad, et al., "Design of directional antennas for wireless sensor networks and the internet of things experiments," IEEE Sensors Letters, vol. 6, no. 9, pp. 1–4, 2022. DOI: 10.1109/LSENS.2022.3202919 issn 2475-1472

  ESCI, 0.43
- [J14] S. Kumar, P. R. Gautam, T. Rashid, A. Verma, et al., "ETDCC: Energy-efficient transmission scheme for dynamic climatic conditions in WSN," TELKOMNIKA (Telecommunication Computing Electronics and Control), vol. 16, no. 3, p. 1126, Jun. 2018. DOI: 10.12928/telkomnika.v16i3.8513 issn 1693-6930 Scopus
- [J15] T. Rashid, S. Kumar, A. Verma, P. R. Gautam, et al., "Pm-EEMRP: Postural movement based energy efficient multi-hop routing protocol for intra wireless body sensor network (intra-WBSN)," TELKOMNIKA (Telecommunication Computing Electronics and Control), vol. 16, no. 1, p. 166, Feb. 2018. DOI: 10.12928/telkomnika.v16i1.7318 issn 1693-6930

  Scopus

- [J16] A. Verma, T. Rashid, P. R. Gautam, S. Kumar, et al., "Fuzzy based stable clustering protocol for Heterogeneous wireless sensor networks," International Journal of Engineering and Technology, vol. 9, no. 4, pp. 2854–2860, Aug. 2017. DOI: 10.21817/ijet/2017/v9i4/170904046 issn 0975-4024 Scopus 2017
- [J17] T. Rashid, S. Kumar, A. Verma, P. R. Gautam, et al., "RB-IEMRP: Relay based improved throughput energy-efficient multi-hop routing protocol for intra body sensor network (INTRA-WBSN)," International Journal of Computer Networks & Communications, vol. 11, no. 02, pp. 69–82, Mar. 2019. DOI: 10.5121/ijcnc.2019.11205 issn 0974-9322 Scopus
- [C1] P. R. Gautam, S. Kumar, A. Verma, and A. Kumar, "Localization of sensor nodes in WSNs using three dimensional angle of arrival detection at BS," in 2019 International Conference on Electrical, Electronics and Computer Engineering (UPCON), ZHCET, AMU, Aligarh: IEEE, Nov. 2019, pp. 1–4. DOI: 10.1109/upcon47278.2019.8980262 isbn: 9781728134550 issn 2687-7767
  Scopus
- [C2] P. R. Gautam, S. Kumar, A. Verma, T. Rashid, et al., Localization of Sensor Nodes in WSN Using Area Between a Node and Two Beacons (Lecture Notes in Electrical Engineering). Motilal Nehru National Institute of Technology, Allahabad: Springer, Dec. 2019, vol. 587, pp. 221–228, 1060 pp. DOI: 10.1007/978-981-32-9775-3\_22 isbn: 9813297743 issn 1876-1100
  Book chapter
- [C3] P. R. Gautam, S. Kumar, and A. Kumar, "Sensor localization in wsns using rotating directional antenna at the base station," in Advances in VLSI, Communication, and Signal Processing, ser. Lecture Notes in Electrical Engineering, vol. 683, Motilal Nehru National Institute of Technology, Allahabad: Springer, Oct. 2020, pp. 705–718. DOI: 10.1007/978-981-15-6840-4\_58 isbn: 978-981-15-6839-8 issn 1876-1100 Book chapter
- [C4] A. Kumar, S. Kumar, P. R. Gautam, A. Verma, et al., Performance Evaluation of Multi-operands Floating-Point Adder (Lecture Notes in Electrical Engineering). JK Institute of Applied Physics and Technology, Allahabad University, Allahabad: Springer Singapore, Dec. 2019, vol. 524, pp. 537–546. DOI: 10.1007/978-981-13-2685-1\_51 isbn: 9811326843 issn 1876-1119
  Book chapter
- [C5] S. Kumar, A. Verma, P. R. Gautam, A. Dayal, et al., "The load balancing of optimizing LEACH clustering algorithm with mobile sink and rendezvous nodes," in 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), Madan Mohan Malaviya University of Technology, Gorakhpur: IEEE, Nov. 2018. DOI: 10.1109/upcon.2018.8596989 isbn: 978-1-5386-5002-8 issn 2687-7759
  Scopus
- [C6] S. Kumar, P. R. Gautam, A. Verma, R. Verma, et al., Energy Efficient Routing using Sectors Based Energy-Hole Reduction in WSNs. ZHCET, AMU, Aligarh: IEEE, 2019. DOI: 10.1109/upcon47278.2019. 8980254 isbn: 978-1-7281-3455-0 issn 2687-7767
  Scopus
- [C7] A. Verma, S. Kumar, P. R. Gautam, and A. Kumar, Stable Energy-Efficient Routing Algorithm for Dynamic Heterogeneous Wireless Sensor Networks (Lecture Notes in Electrical Engineering). Motilal Nehru National Institute of Technology, Allahabad: Springer, Dec. 2019, vol. 587, pp. 221–228, 1060 pp. DOI: 10.1007/978-981-32-9775-3\_15 isbn: 9813297743 issn 1876-1100 Book chapter
- [C8] S. Shilpi, P. R. Gautam, S. Kumar, and A. Kumar, "A comparative analysis of distance-based node localization in wireless sensor network," in 2021 8th International Conference on Signal Processing and Integrated Networks (SPIN), vol. 0, 2021, pp. 118–123. DOI: 10.1109/SPIN52536.2021.9566136 isbn: 9781665435642 issn 0
  Scopus
- [C9] M. Yadav, P. R. Gautam, and K. Singhal P., "Inverse tree interleavers in uav communications for interference mitigation," in *Decision Support Systems for Smart City Applications* (Concise Introductions to AI and Data Science, John Wiley & Sons, Ltd, Dec. 2022, ch. 3, pp. 35–52. DOI: 10.1002/9781119896951.ch3 isbn: 9781119896951 issn
  Book chapter

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