

Dr. Shamna H. R.

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Professional Experience

- March 2019 – till date **Associate Professor & Head**, Department of Information Technology , Government Engineering College Barton Hill, Thiruvananthapuram
- July 2017 – March 2019 **Assistant Professor**, Department of Information Technology, Government Engineering College Barton Hill, Thiruvananthapuram
- July 2016 – July 2017 **Assistant Professor**, Department of Information Technology , Government Engineering College Sreekrishnapuram, Palakkad
- Feb 2006 – June 2016 **Assistant Professor**, Department of Information Technology , Government Engineering College Barton Hill, Thiruvananthapuram

Education

- 2012 – 2018 **Ph.D., NIT Calicut**
Thesis title: *Cross-Layer Design of Protocols for Cooperative Networks*
- 2003 – 2005 **M.Tech. Computer Science & Engineering**
Thesis title: *Modified Adaptive Run-Length Method for Texture Analysis.*
- 1999 – 2003 **B.Tech. Information Technology**

Professional Services

- Member of Board of Studies in Engineering (PG) 2020 - 2021 of Kerala University
- Member of Board of Studies in Engineering (Pass III) of Kerala University since 18.08.2020
- Academic Expert for the recruitment of staff at Centre for Development of Advanced Computing (C-DAC)
- Member of the judging panel in the Final Year Project Award organized by Strategic initiatives for Academic Engagement and Student Activities Committee of IEEE Kerala Section, in association with Genskill
- Expert member for evaluation of project proposals under Student Project scheme at Kerala State Council for Science Technology and Environment
- Member of Technical Committee for the purchase of Computer and accessories for SCT College of Engineering Thiruvananthapuram
- Reviewer of Sadhana- Academy Proceedings in Engineering Sciences, Springer
- Reviewer of International Conferences - IEEE ICCISc 2021, IEEE RAICS 2020, IEEE TENCON 2019
- Session Chair - International Conference on Communication, Control, and Information Sciences (ICCISc2021) July 2021, GEC Idukki, Kerala
- Chairperson, Board of Examiners (UG & PG) - University of Kerala
- Chairperson, Board of Question Paper setters - APJ Abdul Kalam Technological University

Professional Services (continued)

- Member of Scrutiny Boards of University of Kerala and APJ Abdul Kalam Technological University, to scrutinize question papers
- Member of Pass Boards of University of Kerala and APJ Abdul Kalam Technological University
- Member of Syllabus formation committee for MCA and IT of APJ Abdul Kalam Technological University
- Question Paper setter of APJ Abdul Kalam Technological University, University of Kerala, and Cochin University of Science and Technology

Teaching Interests

- Data Communication, Computer Networks, Mobile Computing, Internetworking with TCP/IP, Network Programming, Internet of Things

Seminars, Workshops, and FDPs Conducted

- Coordinator - DTE Sponsored 6 day faculty development programme on Recent Trends in Communication and Networking, January 2020
- Coordinator - TEQIP-II Sponsored 3 day Workshop on Deep Learning, January 2020
- Coordinator - DTE Sponsored 6 day faculty development programme on Mathematical Foundation on Logic & Combinatorics, December 2019
- Coordinator - TEQIP-II Sponsored 3 day Workshop on Machine Learning, February 2019
- Co-coordinator - DTE Sponsored 10 day faculty development programme on E-Commerce & Security, March 2008

Research Publications

Journal Articles

- 1 Shamna, H. R., & Jacob, L. (n.d.). Efficient cooperative mac and routing in wireless networks. 3. [doi:10.14738/tnc.35.1586](https://doi.org/10.14738/tnc.35.1586)
- 2 Shamna, H. R., & Jacob, L. (2017). An energy and throughput efficient distributed cooperative MAC protocol for multihop wireless networks. *Comput. Networks*, 126, 15–30. [doi:10.1016/j.comnet.2017.06.024](https://doi.org/10.1016/j.comnet.2017.06.024)

Conference Proceedings

- 1 Shamna, H. R., & Jacob, L. (2018). End-to-end delay and energy efficiency of multihop wireless networks with cooperative MAC. In *2018 international conference on advances in computing, communications and informatics, ICACCI 2018, bangalore, india, september 19-22, 2018* (pp. 280–285). [doi:10.1109/ICACCI.2018.8554855](https://doi.org/10.1109/ICACCI.2018.8554855)
- 2 Shamna, H. R., Gopi, A., Joby, A. P., & Jacob, L. (2017). Joint mac layer relaying and price based resource allocation in multihop wireless networks. In *2017 IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES)* (pp. 1–6). [doi:10.1109/SPICES.2017.8091343](https://doi.org/10.1109/SPICES.2017.8091343)
- 3 Shamna, H. R., Appari, N. L., & Jacob, L. (2013). Co-operative mac protocol: Performance modeling and analysis. In *2013 IEEE Recent Advances in Intelligent Computational Systems (RAICS)* (pp. 233–238). [doi:10.1109/RAICS.2013.6745479](https://doi.org/10.1109/RAICS.2013.6745479)