

## FACULTY PROFILE

**Name** : **Dr. Kirankumar Y. Bendigeri**



**Designation** : **Assistant Professor**  
**Department** : **Electronics and Communication Engineering**  
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**Vidwan Id** : **125016**  
**Researcher ID (Web of Science)** : **AAI-1041-2021**  
**Google Scholar ID** : **NprlhewAAAAJ**  
**Qualification** : **PhD**

**Professional Experience**  
Teaching experience : **10**  
Industry experience : **NIL**

**Administrative Responsibilities** : **ACME coordinator for Academic Year 2014-15**

**Teaching** :

**No. of Projects Guided**  
UG : **17**  
PG : **01**

### Research

Interest Area : **Wireless networks, IOT, Wireless Sensor Networks**

Patents : **02 Applied**

Research Grants : Received a grant of **5,50,000/-** for the project titled “Sustainable agriculture” under *Empowerment and equity opportunity for excellence in science-2014*, Science and Engineering Research Board - **Department of Science and Technology (SERB-DST)**, Reference number SB/EMEQ-348/2014.

- Publications** : 1. “Intelligent Wireless Multidirectional Fire Extinguishing Robot” book in ‘ICT for Competitive strategies’, 2020, e-ISBN 9781003052098
- Books/Chapters** : 2. “Wireless Sensor Networks and Its Application for Agriculture” book in ‘Lecture Notes on Data Engineering and Communications Technologies’ 2021
3. Real-time monitoring of crop in agriculture using wireless sensor networks book in ‘Lecture Notes on Data Engineering and Communications Technologies’ 2021
- Journals (with citations)** : 1. Kirankumar Y. Bendigeri, Jayashree D. Mallapur, “Energy Aware Node Placement Algorithm for Wireless Sensor Network,” Advance in Electronic and Electric Engineering, vol. 4, pp. 541-548, ISSN: 2231-1297, Feb. 2014.
2. Kiran Y. Bendigeri, Jayashree D. Mallapur “Advanced Monitoring of a Crop in Agriculture using Wireless Sensor Network Topology,” International Journal of Electronics and Communication Engineering & Technology, vol. 6, issue 1, pp. 1-9, ISSN: 0976-6472, Aug. 2015.
3. Kirankumar Y. Bendigeri, Jayashree D. Mallapur, “Multiple Node Placement Strategy for Efficient Routing in Wireless Sensor Networks,” Journal of Wireless Sensor Network, Scientific Research Publication, Vol. 7, pp. 101-112. ISSN: 1945-3086, Sep. 2015.
4. Kirankumar Y. Bendigeri, Jayashree D. Mallapur, “Circular Based Node Placement in Wireless Sensor Networks” International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol – 9, Issue – 10, ISSN : 2278 – 3075, August 2020.
- Conferences** : 1. J. D. Mallapur, Ajaykumar C. Katageri, Kirankumar Y. Bendigeri, “Heterogeneous Network Security”, Proceedings of National Conference on Networking, Embedded and Wireless Systems (NEWS-2010), organized by the Department of Electronics and Communication Engineering, 6<sup>th</sup> August 2010, BMS College of Engineering, Bangalore.
2. J. D. Mallapur, Kirankumar Y. Bendigeri, S. S. Patil, Ravi H. S. “Access Control in Wireless Sensor Network”, Proceedings of National Conference on, Innovations and Trends in Computer and Communication Engineering (ITCCE-2011), organized by Department of Electronics and Communication, 25<sup>th</sup> February 2011, MET Institute of Engineering, Nasik, Maharashtra. J. D. Mallapur,
3. Kirankumar Y. Bendigeri, Ramachandra G. Turkani and Renuka T. Ambiger “Malicious node detection for wireless sensor network” International Conference on Control Communication and Computer Technology, (CCCT), 06<sup>th</sup> – 07<sup>th</sup> August 2011, New Delhi, VITS Delhi
4. Kirankumar Y B, Ramachandra G T, J D Mallapur, “Topology scalability and routing in homogeneous and heterogeneous access networks,” 3rd International Conference on Advances in Recent Technologies in Communication and Computing, (ARTCom), 14-15 Nov 2011, IEEE-DOI: 10.1049/ic.2011.0061, E-ISBN: 978-8-19106-918-1
5. Kiran Y. B, J D. Mallapur, Sharanappa P. H, Somu P. P “Angular Variation Methodology for Landslide Measurement,” Fourth International Conference on Computational Intelligence, Communication Systems and Networks, 24 - 26 July 2012 Pucket, IEEE DOI: 10.1109/CICSyN.2012.19, E-SIBN:978-0-7695-4821-0/12
6. Kiran Y. B, K. Nagarathna, J D. Mallapur, S. Hiremath “Trust Based Secured Routing in Wireless Multimedia Sensor Networks” Fourth International Conference on Computational Intelligence, Communication Systems and Networks, 24 - 26 July 2012 Pucket, IEEE DOI: 10.1109/CICSyN.2012.19, E-SIBN:978-0-7695-4821-0/12
7. Kirankumar Y. Bendigeri, J. D. Mallapur, “Node Placement in Wireless Sensor Network: An Energy Approach”, National conference on recent advances in electronics and computer engineering, Feb 13-15, 2015 IIT Roorkee, IEEE DOI: 10.1109/RAECE.2015.7510223, E\_ISBN: 978-1-5090-2146-8
8. Kirankumar Y. Bendigeri, J. D. Mallapur, “Analysis of Fault Strategies in Wireless Sensor Networks” National conference on recent advances in electronics and computer engineering, Feb 13-15, 2015 IIT Roorkee, IEEE DOI: 10.1109/RAECE.2015.7510223, E\_ISBN: 978-1-5090-2146-8
9. Kirankumar Y. Bendigeri, J. D. Mallapur, “Recovery Based Fault Tolerance in Wireless Sensor Networks”, Second IEEE International Conference on Electrical,

Electronics, Communication, Computer Technologies & Optimization Techniques (ICEECCOT-2017), Dec. 15-16 2017, IEEE DOI: 10.1109/ICEECCOT.2017.8284652, E\_ISBN: 978-1-5386-2361-9

10. Kirankumar Y. Bendigeri, J. D. Mallapur, "Remote sensing and controlling of greenhouse agriculture parameters based on IoT", International conference on Big data, IOT and Data Science (BID), Dec. 20-22 2017, IEEE DOI: 10.1109/BID.2017.8336571, E-ISBN: 978-1-5090-6593-6
11. Kirankumar Y. Bendigeri, J. D. Mallapur, "Intelligent Wireless Multidirectional Fire Extinguishing Robot" 4<sup>th</sup> International conference on Information and Communication Technology for Competitive, Strategies, (ICTCS-2019), DEC 13-14, 2019 Udaipur SCUPUS, CRC PRESS Taylor & Francis, PP 669 – 676, ISBN: 978-1-003-05209-8.
12. Kirankumar Y. Bendigeri, J. D. Mallapur, "Wireless Sensor Networks and its application for Agriculture" 3<sup>rd</sup> International conference on Intelligent Data Communication Technologies and Internet of Things (ICICI 2020) SCUPUS Springer, Organized by JCT college of Engineering and Technology, Coimbatore, India, 27-28 August, 2020, Lecture Notes on Data Engineering and Communications Technologies vol -57, PP 67-687.
13. Kirankumar Y. Bendigeri, J. D. Mallapur, "Real Time Monitoring of Crop in Agriculture using Wireless Sensor Networks", 2<sup>nd</sup> International conference on Innovative Data Communication Technologies and Application (ICIDCA 2020) SCUPUS Springer, Organized by RVS College of Engineering & Technology, Coimbatore, Tamil Nadu, India on 03-04 September 2020, Lecture Notes on Data Engineering and Communications Technologies vol -59, PP 773-785.
14. Kirankumar Y. Bendigeri, J. D. Mallapur, "Direction Based Node Placement in Wireless Sensor Networks", IEEE International conference on Artificial Intelligence and Smart Systems (ICAIS 2021), Organized by JCT college of Engineering and Technology, Coimbatore, India, March 25-27, 2021.

## Events Organized

- :
1. "Image Processing using MATLAB" on 22-25 June 2013 at BEC Bagalkot by Sanjeev from iite Bangalore
  2. "Rapid Qualnet simulator" on 14-15 May 2013 at BEC Bagalkot by suresh and anand, nihon communications Bangalore
  3. "PCB design-Introduction to electronics" on 18 October 2014 A 'SDP' under TEQIP-II by ASMA technologies Hubli.
  4. "Recent trends in Electronics and Communication Engineering" on 11<sup>th</sup> & 12<sup>th</sup> June 2020,

## Conferences/ Symposiums/ Workshops/ Training Programs Attended

- :
1. "Qualnet training" organized by BEC Bagalkot on 3-7 AUG 2010
  2. "FDP on Recent Advances in Wireless Sensor Networks" organized by BEC Bagalkot on 10-12 FEB 2011
  3. "Effective teaching practices" organized by BEC Bagalkot on 3-5 MAR 2012
  4. "Mission 10X Aarambh on teaching practices" organized by BEC Bagalkot on 21 JUL 2012
  5. "Skill development workshop" organized by Jain university Bangalore on 10-11 AUG 2012
  6. "Research retreat" organized by Jain university Bangalore on 18-19 AUG 2012
  7. "Rapid simulation of networks" organized by Nihon Communications Bangalore on 19-20 FEB 2013
  8. "Rapid Qualnet simulator" organized by BEC Bagalkot on 14-15 MAY 2013
  9. "FDP on Recent Advances in Wireless Networks" organized by BEC Bagalkot on 16-18 MAY 2013
  10. "FDP on Implementation of signal processing algorithms using FPGA" organized by BEC Bagalkot on 23-25 MAY 2013
  11. "FDP on Technical Documentation using Latex" organized by BEC Bagalkot on 27-29 MAY 2013
  12. "Soft and evolutionary computing techniques and its application" organized by BEC Bagalkot on 30 MAY-1 JUN 2013
  13. "Image processing using MATLAB" organized by BEC Bagalkot on 22-25 JUN 2013
  14. "FDP on Design, Modeling and Simulation of MEMS devices" organized by BEC

Bagalkot on 10-12 JUL 2013

15. “Capacitive building towards quality teaching and learning” organized by IISC Bangalore on 25 NOV-6 DEC 2013
16. “Capacitive building towards quality teaching and learning” organized by IISC Bangalore on 8-10 JAN 2014
17. “Recent trends and challenges in wireless networks” organized by Nihon Communications Bangalore on 30 SEP-1 OCT AUG 2014
18. “National symposium on sustainable energy technology for academic campuses” organized by BEC Bagalkot on 5-6 JUL 2015
19. “Faculty development programme” organized by IITM on 16-18 JUL 2015
20. “IEEE APS region distinguished speaker programme” organized by BEC Bagalkot on 11 SEP 2015
21. “HRD training and Programme” organized by BEC Bagalkot on 7-8 JAN 2017
22. “Technology – Driven Innovation & Entrepreneurship” organized by BEC Bagalkot on 15-19 FEB 2017
23. “Technology – Driven Innovation & Entrepreneurship” organized by BEC Bagalkot on 30-31 MAR 2017
24. “FDP on Sensor networks” organized by BEC Bagalkot on 8-9 JAN 2018
25. “Labview and its applications” organized by BEC Bagalkot on 1-3 MAR 2019
26. “IEEE Project Expo” organized by GSSS Mysore on 29 APR 2019
27. “Hands Training on Solar Study Lamp Assembly” organized by IITB 1 MAY – 31 DEC 2019
28. “Publishing research in high quality journals” organized by BEC Bagalkot on 19 DEC 2019
29. “Digital Transform in Teaching Learning Process” organized by IITB on 16-30 MAR 2020
30. “AICTE Examination Reform Policy” organized by BEC Bagalkot on 6-7 MAY 2020
31. “Webinar Series on Satellite and Automation” organized by GSSS Mysore and IEEE on 11-13 MAY 2020
32. “FDP on Python” organized by IITB Spoken Tutorial on 1-5 JUN 2020
33. “Next Generation Electronics and Computer Networks” organized by BIT Bhalki on 2-6 JUN 2020
34. “Recent Trends in Electronics and Communication Engineering” organized by BEC Bagalkot on 11-12 JUN 2020
35. “Recent Trends in IT” organized by VIT Bangalore on 15-17 JUN 2020
36. “Machine Learning Based Project Architecture Design” organized by BEC Bagalkot on 15-19 JUN 2020