

Faculty Profile

Dr. Vanishree K is an accomplished **Associate Professor** in the **Department of Information Science and Engineering** at **RV College of Engineering**, Bengaluru, with over 18 years of academic experience.

Her core expertise lies in Computer Networks, Wireless Sensor Networks and IoT-based networking solutions, with significant research contributions in precision agriculture using AI/ML techniques.

Faculty Photo

She holds a Ph.D. from VTU and has authored numerous Scopus and IEEE-indexed publications. Dr. Vanishree has guided over 70 UG and PG student projects, received Honor such as the Best Paper Presentation Award and actively contributes to research, curriculum design, accreditation activities (NBA/NAAC) and interdisciplinary projects under the Center for Computer Vision Research. She is also a Board of Studies member and a lifetime member of IETE and ISTE.

Personal Information

- **Name:** Dr. Vanishree K
- **Designation:** Associate Professor
- **Department:** Information Science & Engineering
- **Email:** vanishreek@rvce.edu.in
- **Phone:** 080-68188465

Google Scholar: [Link - https://scholar.google.com/citations?hl=en&user=-oOPN7cAAAAJ](https://scholar.google.com/citations?hl=en&user=-oOPN7cAAAAJ)

Domain of Expertise

- Computer Networks
- Wireless Sensor Networks

Research Focus

- **Primary Area:** Internet of Things (IoT) Networking, Data Aggregation
- **Allied Areas:**
 - Internet of Things (IoT) for Precision Agriculture
 - Wireless Sensor Networks for Agricultural Monitoring
 - Artificial Intelligence & Machine Learning in Agriculture

Academic Qualifications

- **Ph.D.:** Wireless Sensor Networks, Visveswaraya Technological University, 2024
- **M.Tech:** Computer Network Engineering, Visveswaraya Technological University, 2013
- **B.E.:** Computer Science & Engineering, Visveswaraya Technological University, 2005

Professional Experience

Experience			
Sl. No.	Institute	Job Title	Duration (From- To)
1.	R V College of Engineering, Bengaluru	Associate Professor	December 2024 – Till Date
2.	R V College of Engineering, Bengaluru	Assistant Professor	May 2014 – December 2024
3.	PES Institute of Technology, Bengaluru	Assistant Professor	July 2013 – May 2014
4.	R V College of Engineering, Bengaluru	Lecturer	December 2008 – June 2009
5.	Siddaganga Institute of Technology, Tumkur	Lecturer	August 2005 – October 2008

Publications

Journal Publications

1. **Vanishree K, Nagaraja G S, “Framework Modelling for Effective Precision Agriculture using Predictive Analytics”,** published in the Journal Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition) with Vol. No. 42 Issue No. 02, Page No. 245–256, Impact factor 0.224 and year of publication 2023 published by Editorial Board of Jilin University with DOI: 10.17605/OSF.IO/QBNEU– **Scopus Indexed**.
2. **Vanishree K, Nagaraja G S, “LORA Based Smart Agriculture Monitoring and Automated Irrigation System”,** published in the Journal Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition) with Vol. No. 42, Issue No. 02, Page No.199–208, Impact factor 0.224 and year of publication 2023 published by Editorial Board of Jilin University with DOI: 10.17605/OSF.IO/TJ3H7– **Scopus Indexed**.
3. **Vanishree K, Nagaraja G S, “Novel Framework for Secure Data Aggregation in Precision Agriculture with Extensive Energy Efficiency”,** published in the Journal Hindawi Journal of Computer Networks and Communications with Vol. No. 2023 Article ID 5926294, Page No. 1–11, Impact factor 2.64 and year of publication 2023 published by Hindawi with DOI: 10.1155/2023/5926294 – **Q2 JOURNAL**.
4. **Vanishree K, Nagaraja G S, “Emerging Line of Research Approach in Precision Agriculture: An Insight Study”,** published in the International Journal of Advanced Computer Science and Applications (IJACSA) with Vol. No. 12 Issue No. 02 Page No. 304–317 Impact factor 0.9 and

year of publication 2021 published by The Science and Information (SAI) Organization with DOI: 10.14569/IJACSA.2021.0120239 – **Scopus Indexed**.

5. **Vanishree K, Anusha D, “Web development architectural design and its components”,** International Journal of Advance Research, Ideas and Innovations in Technology, Volume 7, Issue 3, Page no. 474-478, May 2021.
6. Devashish Agarwala, **Vanishree K, “Agriculture field monitoring and analysis using Wireless Sensor Networks”,** International Journal of Advance Research, Ideas and Innovations in Technology, Volume 07, Issue 03, Page no. 1338-1343, June 2021.
7. **Vanishree K, Manasi Agrawal, “A Survey on Customer Relationship Management”,** International Journal of Engineering Research & Technology (IJERT), Volume 10, Issue 06, Page no. 154-158, June 2021.
8. **Vanishree K, Adarsh Agrawal, “Survey on IOT protocols used for application layer”,** International Journal of Scientific Research in Engineering and Management (IJSREM), Volume 05, Issue 06, Page no.1-2, June 2021.
9. **Vanishree K, Udith Shankar M, “Server less Architecture the Future of Computation”,** International Journal of Current Advanced Research, Vol 07, Issue 05, May 2018, pp 2341-2344, ISSN: 2319-6505, <http://dx.doi.org/10.24327/ijcar.2018>.
10. **Vanishree K, Aditya Vedanthu, Rakshith Vishwanath, “Airport Planning and Management Systems”,** International Journal of Recent Scientific Research, Vol 09, Issue 10, Oct 2018, pp 28106-29110.
11. **Vanishree K, Revathi G P, “A Survey on Wireless Transmission Technologies Used for Agriculture Monitoring”,** International Journal of Automation and Autonomous System, Vol 10, No 05, May 2018, pp 93 -97.
12. **Vanishree K, Harisha T.C, “Development of Cloud Based Integrated Energy and Water Monitoring System”,** International Journal for Scientific Research and Development(IJSRD), Vol. 3, Issue 3, May 2015, pages 1920-1923.
13. **Vanishree K, Prakruthi S.N and Pratiba D, “Study On Association Rules and Clustering Methods”,** International Journal of Computer Science and Information Technologies, Vol. 5, Issue 1, Jan 2014, 233-235.
14. **Vanishree K, “A Study on Handoff Techniques to Communicate in Cellular Networks”,** International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE), Vol.3, Issue 4, July 2014.
15. **Vanishree K, Prakruthi S.N and Pratiba D, “Study On Association Rules and Clustering Methods”,** International Journal of Computer Science and Information Technologies, Vol. 5, Issue 1, Jan 2014, 233-235.

16. **Vanishree K and Pratiba D, “A Survey of Multicast Inter-Domain Routing Protocol (Geo-Assisted) for MANETs”,** International Journal of Advanced Research in Computer Science and Software Engineering, Vol. 3, Issue 7, July 2013.

Conference Papers

1. **Vanishree K, Namitha D Jadhav, “Survey on security parameters of operating system”,** IEEE International Conference for Innovation in Technology (INOCON) Technically Cosponsored by IEEE Bangalore Section 06 th - 08th November 2020 - **Scopus Indexed**.
2. **Vanishree K, Nagaraja G S, “Comparative study of Machine learning Approaches n Cropland Mapping”,** published in the Conference 6th International Conference on Computational Systems & Information Technology for Sustainable Solutions [CSITSS-2022] with Page No.1-5 and year of publication 2022 published by IEEE with DOI: 10.1109/CSITSS57437.2022.10026372 - **IEEE Digital Library**.
3. Sanjana Patwari, S S Ashish, Aaditaa Vashisht, Ehsaas Rajpurohit, **Vanishree K, “Digital Transformation in Various Sectors of Indian Economy”,** published in the Conference 8th International Conference on Computational Systems & Information Technology for Sustainable Solutions [CSITSS-2024] year of publication 2024 published by IEEE with DOI: 10.1109/CSITSS64042.2024.10816887 - **IEEE Digital Library**.
4. **Vanishree K, Kavitha D.H, Nagaraj G.C, “A Study on Design Constraint in Operating System Migration”,** National Conference on “Technological Advancement in Computing NCTAC-2014”, 25th & 26th July 2014 at R.V.C.E, Bangalore.
5. **Vanishree K, Abhilash C.N, “Co-operative Localization for Wireless Sensor Networks with Obstacles”,** National Conference on “Recent trends in Computer & Information Technology NCRTCIT-2013”, 10th & 11th May 2013 at JAIN University, Bangalore.
6. **Vanishree K, Navya S.N, “A Survey paper on Dynamic Gateway Assignment to support Inter-Domain Networking in MANETs”,** National Conference on “Recent trends in Computer Science & Engineering NCRTCSE-12”, 10th & 11th April 2012 at S.J.B.I.T, Bangalore.
7. **Vanishree K, Abhilash C.N, “Co-operative Localization for Wireless Sensor Networks with Obstacles”,** National Conference on “Recent trends in Computer & Information Technology NCRTCIT-2013”, 10th & 11th May 2013 at JAIN University, Bangalore.
8. **Vanishree K, Navya S.N, “A Survey paper on Dynamic Gateway Assignment to support Inter-Domain Networking in MANETs”,** National Conference on “Recent trends in Computer Science & Engineering NCRTCSE-12”, 10th & 11th April 2012 at S.J.B.I.T, Bangalore.

Book Chapters

1. **Vanishree K, Dr. Nagaraja G S, “Novel Secure Scheme for On-Field Sensors for Data Aggregation”,** Proceedings of 10th Computer Science International Conference 2021, Volume 01, Page no.428-436, July 2021. SCOPUS INDEXED- Part of the Lecture Notes in Networks and

Ongoing & Completed Research Projects

1. Project titled “Automatic fire & Smoke Detection by Surveillance Cameras” is Ongoing Research Project under the Center for Computer Vision Research, Center of Excellence, RV College of Engineering.

Professional Memberships

1. The Institution of Electronics and Telecommunication Engineers – **IETE Life Time Membership**
2. Indian Society for Technical Education – **ISTE Life Time Membership: LM 141917**

Awards & Recognitions

1. Honored by RSST for obtaining the **Degree of Doctor of Philosophy of Computer & Information Sciences** from Visveswaraya Technological University, Belagavi in March 2025.
2. Received “**Best Paper Presentation Award**” for presenting technical paper in International Conference on “Artificial Intelligence & Machine Learning in Applied Biotechnology” [AIML BIO-2022) organized in RVCE in December 2022.

Student Supervision

- **MTech Students:** 22
- **Undergraduate Research Mentees:** 48

Professional Roles

- **Committee Member:** IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions **CSITSS – 2021, 2022, 2023 & 2024** organized by RV College of Engineering, Bengaluru.

Teaching

Core Courses:

Discrete Mathematical Structures, Information Storage Management, Social Network Analysis, Network Management, Metrics and Models in Software Quality Engineering, Cloud computing, Operating Systems, Software Engineering, Management Information Systems, Principles of Management & Economics

Lab Courses:

Programming In C, Principles of Programming using C, Introduction to C++ Programming, Power BI, Data Structures, Operating Systems, Internet of Things, Design of Advanced Algorithms, OOPs with Java, Cryptography & Network Security, Database Systems, Cloud Native Automation

Responsibilities

- **Academic:** Syllabus Coordinator, MOOC course Coordinator, Minor Project Coordinator, CIE Coordinator, Skill Lab Coordinator, Exam Coordinator, Technical Paper Publication Coordinator, Department Library In charge
- **Administrative:** NBA Criteria In charge, NAAC Criteria In charge, UG Panel member, Member of Center of Excellence – Center for Computer Vision Research (CCVR), Course Coordinator, Lab In-charge for the courses Programming in C and Introduction to C++ Programming.

External Connect

- Member of **Board of Studies**, Department of Information Science & Engineering, RV College of Engineering from academic year 2024– 25.