

Faculty Profile

Brief Profile

Faculty Photo

Currently working as Associate Professor in Department of MCA, RV College of Engineering, Bengaluru, Karnataka, India. Expert in Wireless Sensor Networks Internet of Things (IoT) with 15 years of experience teaching at the college level.

Completed Consultancy Projects more than Rs 70+ Lakhs. Developed IoT communication devices with BLE, Wi-Fi, LoRA and UWB technologies. Conducted 30+ Trainings all over India on IoT and Mobile Application Development using Android. Free and Open Software Activist and advocates the importance of right to learn, and sharing with others.

Distinguished record of publication in academic journals all over the world. Dedicated partner in college events and outreach programs that help to promote learning and support the student community. Published International papers in reputed indexed journals including Springer, Inderscience, Scopus and IEEE. Presented research works and results in London, Italy, Malaysia and Indonesia. Technical Program Committee member in various conferences conducted in United States, London, Spain, France, Dubai, Mauritius, Malaysia and Indonesia. Holds a granted patent for a novel invention titled: "Method, System and Apparatus for Location-Based Dynamic Seat Reservation and Status Display", granted on 14th February 2025.

Personal Information

- **Name:** Dr. Deepika K
- **Designation:** Associate Professor
- **Department:** Master of Computer Applications
- **Email:** deepikak@rvce.edu.in
- **Phone:** 080-68188176

Google Scholar - <https://scholar.google.co.in/citations?user=mOGaV3IAAAAJ>

ResearchGate - <https://www.researchgate.net/profile/Deepika-Kripanithi>

LinkedIn: <https://www.linkedin.com/in/deepikakhemanth/>

ORCID: <https://orcid.org/0000-0001-6198-0602>

Domain of Expertise

Research Focus

- **Primary Area:** Intelligent Sensor Networks & Internet of Things (IoT)
- **Allied Areas:**
 - Energy-Efficient Sensor Design
 - Remote Sensing and Satellite Communication
 - Smart Cities and Infrastructure
 - Environmental Monitoring Systems
 - Wireless Sensor Networks (WSNs)

Academic Qualifications

- **Ph.D.:** in Applied Sciences, Visvesvaraya Technological University, 2020 (Thesis Title – Improvement of Human Tracking using Sensor Based System)
- **MCA:** Computer Applications, University of Madras, 2011
- **BCA:** Computer Applications, University of Madras, 2008

Professional Experience

Experience: 15 Years			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering	Associate Professor	December 2024 – till date
2.	RV College of Engineering	Assistant Professor	February 2015 – December 2024
3.	Dr. MGR Janaki College Arts & Science for Women	Assistant Professor	June 2011 – January 2015

Publications & Patents

Journal Publications

1. Deepika K & Usha J, “Automation of smart monitoring for person localisation and alerting network” in International Journal of Information Technology and Management, Vol.20, Print ISSN: 1461-4111 Online ISSN: 1741-5179.
2. Deepika K and Usha J , "Investigations & Implications on Location Tracking Using RFID with Global Positioning Systems", International Journal of Business Innovation and Research 15th to 17th August 2016, at Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia, ISBN:978-1-5090-2549-7/16/\$31.00 ©2016 IEEE , pp270-275
3. Deepika K and Usha J,"Analysis of UHF ISO/IEC 14443 Gen 2 RFID Technology" , International Journal of Computational Engineering Research (IJCER), ISSN (Online) : 2250-3005, Volume 06, Issue 04, April 2016, pp 48 - 55.

Conference Papers

1. Deepika K and Usha J, “Design & development of location identification using RFID with Wi-Fi positioning systems”, 2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN) from 4th July to 7th July 2017 at Milan, Italy, ISBN: 978-1-5090-4749-9/17/\$31.00 ©2017 IEEE, pp 488-493
2. Deepika K and Usha J, "Identification of UHF Gen 2 RFID Privacy and Security Issues", Proceedings of The 4th International IEEE Conference on Radar, Antenna, Microwave, Electronics and

Telecommunications (ICRAMET) 2015, 5th - 7th October 2015, Bandung, Indonesia, pp 82-86, ISBN: 978-1-4673-9422-2/15@ 2015 IEEE.

3. Deepika K and Usha J, “Comparative Analysis of Location Based Positioning Systems”, International Conference on Research in Business Management and Information Technology(ICRBIT2015), R.N. Shetty Institute of Technology (RNSIT), Bengaluru, 29th - 30th April 2015, ISBN 9788193041154 © 2015, ELK Asia Pacific Journals, pp 5457.

Books/Book Chapters

1. Deepika, K., Renuka Prasad, B. (2023). IoT-Based Dashboards for Monitoring Connected Farms Using Free Software and Open Protocols. In: Jacob, I.J., Kolandapalayam Shanmugam, S., Izonin, I. (eds) Data Intelligence and Cognitive Informatics. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-19-6004-8_43
2. Deepika, K., Renuka Prasad, B. (2022). High-Precision Indoor Tracking Using Ultra-Wide Band Devices and Open Standards. In: Smys, S., Balas, V.E., Palanisamy, R. (eds) Inventive Computation and Information Technologies. Lecture Notes in Networks and Systems, vol 336. Springer, Singapore. https://doi.org/10.1007/978-981-16-6723-7_48
3. Deepika K, Usha J, Implementation of Personnel Localization & Automation Network (PLAN) Using Internet of Things (IoT), Procedia Computer Science, Volume 171, 2020, Pp 868-877, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2020.04.094>.

Patents

1. Application No: 201941009038

Title: METHOD, SYSTEM AND APPARATUS FOR LOCATION-BASED DYNAMIC SEAT RESERVATION AND STATUS DISPLAY

Date of Publication: 11/09/2020

FER Reply Filed: 01/10/2021

Application Status: Granted on 14/02/2025

R & Grants & Consultancy Projects Completed Research Projects

- Awareness Creation and Detection of Vector Borne Disease -Dengue for Public Health (22-HAC-128)- Funding Agency: IEEE HAC, Duration: [May 2022- Nov 2022], Role: Co-PI.

Ongoing & Completed Consultancy Projects

Ongoing Consultancy Projects

- e-NoSens: An IoT based Smart and Portable Sensor Device for Rapid Detection of Meat Spoilage”, BioSouk-Life Sciences LLP
- IoT Platform for Multiple Bio Gas plant Monitoring, Ongoing Greeneria Renewable Technologies Pvt Ltd
- Live Stock Management S/W with IoT Based Automated Weighscale Hardware Integration, Profive Infotech, Bengaluru

- **Precision Agriculture App for Automation of Irrigation and Fertigation in Arecanut Farms,** BSOL Systems Pvt Ltd

Completed Consultancy Projects

- **IoT Integration for Special Purpose Manufacturing Equipments for Production Monitoring,** Thayne Automation, Role: Co - PI
- **Subject Matter Expert (SME) and Instructor for Internet of Things (IoT),** upGrad Education Pvt Ltd., Bengaluru, Duration - 1st June - 31st December 2022, Role: PI
- **Development of Bluetooth Simulator,** ASM Technologies Limited, Role: Co - PI
- **Mobile Development for EAPL App,** EAPL, Role: PI
- **Ethernet Connectivity for Annunciator and Energy Meter,** EAPL, June 2023, Role: Co-PI

Professional Memberships

- Institute of Electrical and Electronics Engineers (IEEE)
- Computer Society of India (CSI)

Awards & Recognitions

- Received Appreciation Award in Recognition of Outstanding Dedication, Commitment & Invaluable Contribution to the field of education from JSW Steel Limited, Reach the Need & RVCE on 17th September 2024
- Honored by RSST on 26th January 2019 for publishing papers in Indexed Journals.
- Honored by ISTE, R.V.C.E Chapter on 4th March 2021 for the Award of PhD in Computer Applications.
- Certified Mobile Apps Developer and Trainer by Infosys Limited on 4th April 2015

Student Supervision

- **Ph.D. Candidates: 01 (Pursuing)**
- **MCA. Students: 138**

Professional Roles

- **Editorial Board: RVJSTEAM,**
- **Reviewer: IEEE – Internet of Things (IoT)**

Teaching

Core Courses: [Current semester]

- MCA221IA – Modern Application Development

Lab Courses:

- MCA221IA – Modern Application Development

Professional Roles Responsibilities

- **Academic:** Department Website Coordinator
- **Administrative:** Information Center Coordinator

External Connect

- Industry Collaboration & Consultancy
- Corporate Training & Certification Programs
- International Conferences
- FOSS-Based Community Initiatives

Projects

Number of UG Projects Guided	Number of PG Projects Guided	No. of Doctorate Students	
NA	72	Completed	In Progress
		00	01

Publications

National Journals	National Conferences	International Journals	International Conferences	Book Chapters Published	Patent Granted
NA	01	03	04	03	01