# Faculty Profile Brief Profile

Faculty Photo

Currently working as Associate Professor in Department of MCA, RV College of Engineering, Bengaluru, Karnataka, India. Expert in Computer Network Security and Internet of Things (IoT) with 25+ years of experience teaching at the college level.

Completed Consultancy Projects more than Rs 90+ 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, Progressive Web Apps & Cross Platform App Development.

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. Holds a granted patent for a novel invention titled: "Method, System and Apparatus for Location-Based Dynamic Seat Reservation and Status Display", granted on 14<sup>th</sup> February 2025.

#### **Personal Information**

Name: Dr. Renuka Prasad B

• **Designation:** Associate Professor

• **Department:** Master of Computer Applications

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Google Scholar: https://scholar.google.co.in/citations?hl=en&user=mKNfkTcAAAAJ

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# **Domain of Expertise Research Focus**

- Primary Area: Internet of Things (IoT) & Wireless Networks
- Allied Areas:
  - Energy-Efficient Sensor Design
  - o Human-Computer Interaction (HCI)
  - o Smart Environments and Applications
  - o Internet of Things (IoT) Communication Protocols
  - o Environmental Monitoring Systems
  - o Wireless Security Protocols

#### **Academic Qualifications**

• **Ph.D.**: Dr M.G.R Educational and Research Institute University, 2012,

• M.Phil: Manonmaniam Sundaranar University, 2003

MCA: Computer Applications, Visveswaraya Technological University, 2002

• BCA: Computer Applications, Bangalore University, 1999

#### **Professional Experience**

Experience: 15 Years							
S.No	Institute/College/Industry	Job Title	Duration (From- To)				
1.	RV College of Engineering	Associate Professor	2013 to till date				
2.	RV College of Engineering	Assistant Professor	2010 to 2013				
3.	RV College of Engineering	Lecturer	2005 to 2010				
4.	PES Institute of Technology	Lecturer	2004 to 2005				
5.	KLE's S Nijalingappa College	Lecturer	2002 to 2003				

#### **Publications & Patents**

#### **Journal Publications**

- 1. Design and efficient Deployment of honeypot and dynamic rule based Live Network Intrusion Collaborative System", International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.2, March 2011, pp. 52-65
- 2. Information extraction anomaly for offline detection in NIDS", International Journal of Computer science and network security, Vol 8. No. 9., September 2008, pp. 309 315.

#### **Conference Papers**

- 1. DoS Attack Pattern Generator For Training The Neural Network Based Classifier To Dynamically Blacklist IP in HoneyPot Based NIDS/NIPS", International Conference on contours of computing technology Thinquest 2010, Maratha Mandir's Babasaheb Gawde Institute of Technology, Mumbai, 13th and 14th March 2010, ISBN: 978-84-8489-988-2, SringerLink Publication
- 2. Hybrid Framework for Behavioral Prediction of Network Attack Using Honeypot and Dynamic Rule Creation with Different Context For Dynamic Blacklisting", 2nd International Conference on Communication Software and Networks (ICCSN 2010), Singapore, 26th 28th February 2010, pp 471-475.
- 3. Statistical based anomaly detection technique for detecting intrusions in Snort N-IDS", International Conference on Computer Networks and Security, ICCNS 2008, 27th 28th September, 2008, Pune, pp. 73 78

#### **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. <a href="https://doi.org/10.1007/978-981-19-6004-8">https://doi.org/10.1007/978-981-19-6004-8</a> 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. <a href="https://doi.org/10.1007/978-981-16-6723-7\_48">https://doi.org/10.1007/978-981-16-6723-7\_48</a>

#### **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 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, Role: PI
- IoT Platform for Multiple Bio Gas plant Monitoring, Ongoing Greeneria Renewable Technologies Pvt Ltd, Role: PI
- Live Stock Management S/W with IoT Based Automated Weighscale Hardware Integration, Profive Infotech, Bengaluru, Role: PI
- Precision Agriculture App for Automation of Irrigation and Fertigation in Arecanut Farms, BSOL Systems Pvt Ltd, Role: PI
- Precision Agriculture App for Automation of Irrigation and Fertigation in Arecanut Farms, BSOL Systems Pvt Ltd, Role: Co- PI

#### **Completed Consultancy Projects**

- IoT Integration for Special Purpose Manufacturing Equipments for Production Monitoring,
- Thayne Automation, Role: PI

- Development of Bluetooth Simulator, ASM Technologies Limited, Role: PI
- Ethernet Connectivity for Annunciator and Energy Meter, EAPL, June 2023, Role: PI
- Mobile Development for EAPL App, EAPL, Role: Co-PI

# **Professional Memberships**

• Life Member of Indian Society for Technical Education

#### **Awards & Recognitions**

• Short listed in grand challenge (7th Position) hosted by Digital University, Kerala

#### **Student Supervision**

• MCA. Students: 150

#### **Professional Roles**

Editorial Board:

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- Chair/Committee Member:
  - o IEEE Conferences Reviewer for many Engineering colleges
  - o Reviewer for ICOECA 2023, 2024
  - o Local Chair for ICOECA 2026)

#### **Teaching**

**Core Courses:** [Current semester]

• MCA224B3 – Internet of Things Applications

#### **Lab Courses:**

• MCA224B3 – Internet of Things Applications

# **Professional Roles Responsibilities**

• **Academic:** Department Budget Committee Member

• Administrative:

#### **External Connect**

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

# **Projects**

Number of UG Projects Guided	Number of PG Projects Guided No. of Doctorate Stude		rate Students
NA	126	Completed	In Progress
1471		00	01

# **Publications**

National	National	International	International	Book Chapters	Patent Granted
Journals	Conferences	Journals	Conferences	Published	
NA	NA	02	03	02	01