

## FACULTY PROFILE

**Name of the faculty: Ramya P**

Department: ECE

College: Seshadri Rao Gudlavalleru Engineering College

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**ACADEMIC QUALIFICATIONS:** M.Tech

### **ACADEMIC REWARDS / ACHIEVEMENTS:**

- GATE 2011 qualified.
- UGC NET JUNE 2014 JRF, Lectureship qualified.
- Ratified by JNTUK, Kakinada
- 4 Excellence awards (Infosys)
- Received letter of appreciation for the subject - Real Time Operating Systems.

### **PROFESSIONAL EXPERIENCE:**

<b>Designation</b>	<b>Institution</b>	<b>Period</b>
Assistant Professor	Seshadri Rao Gudlavalleru Engineering College	March 1 <sup>st</sup> 2014 to till date
Senior Software Engineer	Infosys Technologies	4 years Dec 17 <sup>th</sup> 2007-Nov 30 <sup>th</sup> 2011
Embedded Engineer	Network Informatics	1.4 years Aug 7 <sup>th</sup> 2006- Nov 30 <sup>th</sup> 2007

### **PROJECTS GUIDED:**

<b>PhD</b>	<b>Post Graduation</b>	<b>Under Graduation</b>
-	3	12

**SPECIALIZATION:** Embedded Systems

**RESEARCH PAPERS / BOOKS:**

**PAPERS PUBLISHED IN JOURNALS:**

- [1]. Ramya.P, Radha.K, “Design of Efficient Transport Protocol for Multimedia through Wireless Networks”, *International Journal of Recent Technology and Engineering*”, Vol.2, Issue 3, pp 55-58, July 2013.
- [2]. P.Ramya , K.Rambabu, Y.Sudhakar, “ Design and analysis of 128 bit Area Efficient Carry Select Adder”, *International Journal of Applied Engineering Research*, Vol.9, Number 21 , pp 11185-11194,2014.
- [3]. Ramya.P, Priyadarshini.V, Sai Ram Vamsi.T, “Customizing AOSP on ARM,MIPS,x86 Platforms,*International Journal of Engineering Associates*, Vol.3, Issue 7,pp 20-23,2014.
- [4]. Ramya.P, Priyadarshini.V, “Design of Low Power Energy Efficient Full Adder Circuits”, *IJSET*, Vol.1, Issue 6, pp. 563-569, August 2014.
- [5]. Ramya.P, Priyadarshini.V, “Design of 32-bit ALU using Low Power Energy Efficient Full Adder Circuits”, *IJCTA*, Vol.5, pp 1754-1762, sep-oct 2014.
- [6]. Ramya.P, Priyadarshini.V, Chandu.P, “Internet of Everything and Secure Cloud for Real World Data Management”, *International Journal of Computer Applications*, Vol. 104, Issue 13, pp 9-11, October 2014.
- [7]. Ramya.P, Bhavani S, Priyadarshini.V, “An Improved Energy Efficient and Certificate Revocation Technique for Mobile Ad Hoc Networks”, *International Journal on Computing, Communications and Systems (IJCCS)*, Vol. 4, Issue 2, pp 30-33, December 2015.
- [8]. P.Ramya, G.Sri kanya, “ESDIT:An Approach for Improving Performance in MANET by Detecting and Isolating Selfish Nodes”, *International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE)*, Vol. 5, Issue 7, pp 685-689, July 2016.
- [9] Ramya.P, Sairam Vamsi T, G.R.L.V.N.S. Raju , “Design of Intelligent Accident Avoiding System using GSM & GPS”, *International Journal for Modern Trends in Science and Technology* , Vol. 03, Issue 07, pp 310-314,July 2017,
- [10] Ramya.P, Sairam Vamsi T, “Impact analysis of blackhole, flooding and grayhole attacks and enhancing security in Mobile Ad hoc Networks using SHA3 algorithm”, Springer LNEE. pp 639-647
- [11] Ramya.P, Sairam Vamsi T, Dr.G.R.L.V.N.S Raju “A Survey on Underground Distributed Wireless Sensor Networks:Design & Research Challenges” IRACST –

International Journal of Computer Networks and Wireless Communications (IJCNWC), ISSN: 2250-3501 Vol.7, No 6, Nov-Dec 2017.

[12] Ramya.P, Sairam Vamsi T, “Securing MANETs Using SHA3 Keccak Algorithm”, *ICICCT 2019 – System Reliability, Quality Control, Safety, Maintenance and Management*, ICICCT 2019, Springer, Singapore, pp. 328-335, June 2019.

[13] Ramya.P, Padmalatha L, “IoT Based Health Monitoring System (IHMS)”, *Machines, Mechanism and Robotics*, Springer LNME, IIT Mandi, August 2021.

[14] Ramya.P, “Optimization of Energy Efficiency in Multi-Channel Co-Operative Spectrum Sensing in Cognitive Radio Networks”, *Telecommunications and Radio Engineering*, Volume 83, Issue 11, page 29-38, 2024. DOI: 10.1615/TelecomRadEng.2024050154.

### **PAPERS PUBLISHED IN CONFERENCES/WORKSHOPS:**

[1]. P.Ramya, K.Radha, “An Efficient Approach for Multimedia Streaming through Wireless Networks”, *2<sup>nd</sup> International Conference on Innovation in Electronics and Communication Engineering (ICIECE-2013)*, GNIT, Aug 9<sup>th</sup> -10<sup>th</sup>, 2013.

[2]. Ramya.P, Bhavani S, Priyadarshini.V, “An Improved Energy Efficient and Certificate Revocation Technique for Mobile Ad Hoc Networks”, *IEEE sponsored 4<sup>th</sup> International Conference on Communications, Signal Processing, Computing and Information Technologies (ICCSPCIT-2015)*, MRCET, December 18<sup>th</sup> -19<sup>th</sup>, 2015.

[3] Ramya.P, Sairam Vamsi T , G.R.L.V.N.S. Raju , “Design of Intelligent Accident Avoiding System using GSM & GPS”, *International Conference on Recent Advances in Electronics and Communications*, ICECE 2017, CIET, 7<sup>th</sup> – 8<sup>th</sup> July 2017.

[4] Ramya.P, Sairam Vamsi T, Manideepthi.Kolli, “ Cryptographic approach for defending vulnerabilities in MANETS”, Springer, 6<sup>th</sup> International Conference on innovations in Electronics & Communication Engineering, ICIECE-2017, GNIT, July 21<sup>st</sup> -22<sup>nd</sup>, 2017.

[5] Ramya.P, Sairam Vamsi T , “Impact analysis of blackhole, flooding and grayhole attacks and enhancing security in Mobile Ad hoc Networks using SHA3 algorithm” , Springer, 3<sup>rd</sup> International Conference on Micro-Electronics, Electromagnetics and Telecommunications, ICMEET 2017, BVRIT, 9<sup>th</sup> – 10<sup>th</sup> September 2017 .

[6] Ramya.P, Sairam Vamsi T, “Securing MANETs using SHA3 Keccak Algorithm”, Springer, International Conference on Intelligent Computing and Communication Technologies (ICICCT – 2019), BVRIT, 9<sup>th</sup> -11<sup>th</sup> January 2019.

[7] Ramya.P, Padmalatha L, "IoT BASED HEALTH MONITORING SYSTEM (IHMS)", 4th International and 19th National Conference on Machines and Mechanisms (iNaCoMM 2019), Springer, IIT Mandi, 5<sup>th</sup> – 7<sup>th</sup> December 2019.

[8] Sk.Esafiroz, Y.T.V. Subrahmanyam, R.Pranay, P.Tirumala Rao, P.Ramya, "Vehicle Rental and Tracking System Using Blockchain", International Conference on Emerging Trends in Engineering and Technology (ICETET – 2023), Springer, NREC, 9<sup>th</sup>-10<sup>th</sup> June 2023.

### **LIST OF WORKSHOPS ORGANIZED:**

- Presented almost 30 knowledge Transfer Sessions (workshops) for Microsoft Team members. (Industry).
- Coordinated workshop on "Embedded Systems Design & Programming".
- Conducted practical sessions for M.Tech students on Linux programming.
- Coordinated "Job oriented training" for M.Tech students.

### **LIST OF WORKSHOPS /CONFERENCES /SEMINARS ATTENDED:**

- One day workshop on "Speech processing: current challenges and hands-on experience" on 23<sup>rd</sup> Aug 2014 at Gudlavalleru Engineering College.
- One day workshop on "Ultra Low Power Communication using CC430 Microcontroller: Hands-on experience" on 7<sup>th</sup> Feb 2015 at Gudlavalleru Engineering College.
- One day workshop on "Open Hardware" on 6<sup>th</sup> Feb 2015 at Koneru Lakshmiiah University, Vijayawada.
- Two day FDP on "Research Challenges and Issues in Big Data using Hadoop Framework" on 12<sup>th</sup> -13<sup>th</sup> Mar 2015 at Gudlavalleru Engineering College.
- One day Workshop on "Research in Energy Management Wireless Networks and Smart Transportation Systems" organized by the Institute of Engineers (IE), INDIA, Vijayawada local Center, Vijayawada on 29<sup>th</sup> March 2015.
- One day workshop on "Embedded Technologies" on 30<sup>th</sup> October 2015 at V.R.Siddhartha Engineering College, Vijayawada.
- One week FDP on "Development of Wireless Sensor Networks using Network Simulator(NS2) – Hands on Experience on 1<sup>st</sup>-5<sup>th</sup> December 2015 at GEC, Gudlavalleru.
- 2<sup>nd</sup> *International Conference on Innovation in Electronics and Communication Engineering (ICIECE-2013)*, GNIT, Aug 9-10, 2013.
- *IEEE sponsored 4<sup>th</sup> International Conference on Communications, Signal Processing, Computing and Information Technologies (ICCSPCIT-2015)*, MRCET, December 18-19, 2015.
- One week refresher course on "Microprocessors and microcontrollers" on 17<sup>th</sup> – 21<sup>st</sup> November at GEC, Gudlavalleru.

- Three day FDP on “VLSI design techniques using Xilinx & Mentor Graphics EDA tools” on June 23<sup>rd</sup> – 25<sup>th</sup>, 2016 at Andhra Loyola Institute of Engineering and Technology, Vijayawada.
- Two day staff training program on " Simulation of Linear & Digital Integrated Circuits and Microcontroller based Applications using NI Multisim” on 4<sup>th</sup> -5<sup>th</sup> November 2016 at Gudlavalleru Engineering College, Gudlavalleru.
- One week Faculty Development Programme on “Hands on Experience in Signal Processing Applications” on 7<sup>th</sup>-12<sup>th</sup> November, 2016 at Gudlavalleru Engineering College, Gudlavalleru.
- Two day national level workshop on “Research Methodologies” on 3<sup>rd</sup> – 4<sup>th</sup> February 2017 at Ramachandra College of Engineering, Eluru.
- Two day training programme on “Mentor Graphics Tools” on 31<sup>st</sup> August-1<sup>st</sup> September 2017 at Gudlavalleru Engineering College, Gudlavalleru.
- Two day faculty training programme on “Advances in VLSI Design and Embedded Systems” on 6<sup>th</sup> -7<sup>th</sup> November 2017 at Gudlavalleru Engineering College, Gudlavalleru.
- One week national level Faculty Development Programme on “Signal and Image Processing using LabVIEW” on 13<sup>th</sup> – 18<sup>th</sup> November 2017 at Gudlavalleru Engineering College, Gudlavalleru.
- Two day Hands-on workshop on “IPv4 & IPv6” on 24<sup>th</sup> – 25<sup>th</sup> November 2017 at Gudlavalleru Engineering College, Gudlavalleru.
- One week Faculty Development Programme on “Communications and Signal Processing” on 29<sup>th</sup> October - 3<sup>rd</sup> November 2018 at Gudlavalleru Engineering College, Gudlavalleru.
- One day workshop on “NPTEL Awareness Program” on 6<sup>th</sup> December 2018 at Gudlavalleru Engineering College, Gudlavalleru.
- One week Faculty Development Programme on “Real Time Embedded Systems and IoT, Its Applications” (RESIoT) on 17<sup>th</sup> – 22<sup>nd</sup> December 2018 at Vasavi College of Engineering, Hyderabad.
- NPTEL AICTE FDP on “Introduction to Internet of Things”.
- NPTEL AICTE FDP on “Introduction to Industry 4.0 and Industrial Internet of Things”.
- One week FDP on " Sensor Networks & IoT" on 26<sup>th</sup> - 31<sup>st</sup> August 2019 at VNR Vignan Jyothi Institute of Engineering and Technology ( EICT NIT Warangal).
- One week online FDP on "Data science and Cloud Computing" on 18<sup>th</sup> - 22<sup>nd</sup> May 2020 by Chebrolu Engineering College/
- One week online FDP on "Artificial Intelligence" on 22<sup>nd</sup> May - 26<sup>th</sup> May organized by Gayathri Vidya Parishad College for Degree and PG Courses in collaboration with Brain O vision.

- One week International online Knowledge Development Program on " Challenges and advancements in the design of IoT , Embedded and VLSI systems: A researcher's view" on 8<sup>th</sup> - 13<sup>th</sup> June 2020 organized by Gudlavalleru Engineering College, Gudlavalleru.
- One week refresher course on " Embedded System Design" on 27<sup>th</sup> July - 1<sup>st</sup> August 2020 organized by Gudlavalleru Engineering College, Gudlavalleru.
- One week online FDP on "Cyber Security" on 22<sup>nd</sup>-26<sup>th</sup> July 2020 organized by Gudlavalleru Engineering College, Gudlavalleru.(Cyberpsy)
- Webinar on “Value of IEEE Content in Engineering Education and Research” on 14<sup>th</sup> July 2020 by EBSCO.
- A National Level Webinar On “Intellectual Property Rights & Patents - A View”, during 10<sup>th</sup> - 12<sup>th</sup> August, 2020 by Gudlavalleru Engineering College, Gudlavalleru.
- NPTEL AICTE FDP on “Computer Networks & Internet Protocol”.
- NPTEL AICTE FDP on “Design for Internet of Things”.
- One week National Level FDP on "Trends in ESD and IoT" during 20<sup>th</sup> -25<sup>th</sup> June 2022 organized by ECE Department, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.
- NPTEL AICTE FDP on “ System Design Through Verilog”
- Faculty Orientation on Python Programming organized Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru
- One week FDP on “IoT, Industry 4.0 and Stress Management” on 17<sup>th</sup> – 22<sup>nd</sup> July 2023 organized by Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.
- NPTEL AICTE FDP on “Python for Data Science”.
- NPTEL AICTE FDP on “Applied Accelerated Artificial Intelligence”
- Refresher course on “Microcontroller and Embedded system” on 9<sup>th</sup> to 13<sup>th</sup> , Jan 2024 organized by Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.
- Attended FDP on Generative AI from 26<sup>th</sup> – 28<sup>th</sup> June 2024 organized by Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru.

**CERTIFICATIONS/Training Programs Attended No:**

1. Training program on “Training Teachers for Excellence”, organized by Gudlavalleru Engineering College 19.8.14-21.8.14 & 29.12.14-31.12.14.
2. 8 Infosys certifications (related to Product Engineering)
3. Faculty Industrial Training program on “ARM Controller Programming” during 11<sup>th</sup> June 2018 to 11<sup>th</sup> July 2018 at Efftronics Systems Pvt. Ltd. At Vijayawada
4. NPTEL certification on “Real Time Operating Systems” with Elite
5. NPTEL certification on “Introduction to Internet of Things” with Elite
6. NPTEL certification on “Introduction to Industry 4.0 and Industrial Internet of Things” with Elite + Silver
7. AICTE sponsored online training program on "Blockchain Architecture Design and Use cases " Phase I on 10<sup>th</sup> - 15<sup>th</sup> August organized by Gudlavalleru Engineering College
8. NPTEL certification on “Computer Networks & Internet Protocol” with Elite + Silver
9. NPTEL certification on “Design for Internet of Things” with Elite
10. NPTEL certification on “ System Design Through Verilog” with Elite + Silver
11. NPTEL certification on “Python for Data Science” with Elite + Silver
12. NPTEL certification on “Applied Accelerated Artificial Intelligence” with Elite
13. edX certification on “ IoT Sensors and Devices”
14. edX certification on “Introduction to the Internet of Things (IoT)”
15. edX certification on “IoT Networks and Protocols”
16. edX certification on “Cybersecurity and Privacy in the IoT”
17. edX certification on “IoT Programming and Big Data”
18. edX certification on “Build Your First Internet of Things (IoT) Application on Arm”
19. edX certification on “Deep Learning with Python and PyTorch”
20. edX certification on “Deep Learning with Tensorflow”
21. edX certification on “PyTorch Basics for Machine Learning”
22. edX certification on “Deep Learning Fundamentals with Keras”

**GUEST LECTURES DELIVERED: ----**

**MEMBERSHIP IN PROFESSIONAL BODIES: ----**

S. No.	Name of the Professional body	Membership Number
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1	The Institution of Engineers India (IE)	AM162862-6
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**CONSULTANCY ACTIVITIES: ----**

**GRANTS FETCHED: ----**

### **Subjects Handled**

#### **Under Graduation**

- Computer Architecture and Organization
- Real Time Operating Systems
- Computer Networks
- Embedded Real Time Operating Systems
- Microcontrollers and Embedded Systems
- Computer and Communication Networks
- Embedded System Design
- Trends in IoT
- Computer Organization and Microprocessors
- Computer Networks & Network Security

#### **Post-Graduation**

- Embedded System Design
- Embedded Real Time Operating Systems
- Embedded C
- Embedded Computing
- Advanced Embedded Systems
- Internet of Things
- Embedded Systems & Internet of Things

### **Labs Handled**

#### **Under Graduation**

- Electronic Devices and Circuits Lab
- Microprocessors and Microcontrollers Lab
- Microprocessors and Interfacing Lab
- Electronic Devices Lab
- Python Programming Lab
- IoT Lab



### **Post-Graduation**

- HDL Lab
- Embedded Systems Lab
- Advanced Digital Design Lab
- Embedded Systems & IoT Lab

### **Other Responsibilities**

#### **College Level**

- Member in Budget team for GECFEST'15 and GECFEST'16
- Member in Registration and Reception team for GECFEST'17
- Member in Program Organizing Committee for CITAES'18

#### **Department Level**

- Online Feedback coordinator
- Online Anti-ragging Feedback coordinator

### **Projects Guided**

#### **Under Graduation**

<b>S. No</b>	<b>Name of the project</b>	<b>Year</b>
1	A Web Application for Public Distribution System	2015
2	Synthesis and Simulation of a 32-bit Pipelined Processor	2016
3	Human less Boat For Coastal Area Surveillance	2017
4	IoT based Health monitoring system using Arduino	2018
5	IHMS: An IoT Based Application For Real Time Health Monitoring System	2019
6	Smart Health Care Monitoring System Using Raspberry Pi	2019
7	Intelligent Traffic Control System Using RFID and GSM	2020
8	Machine Learning Based Automatic Covid-19 Detection & Control System	2022
9	Vehicle Rental and tracking System using Blockchain	2023

10	Decentralized e-voting using Blockchain	2023
11	Image Authenticity Verifier - An Approach to Identify DeepFakes	2024
12	Road Accident Prediction Using Machine Learning	2024

### **Post-Graduation**

<b>S.No</b>	<b>Name of the project</b>	<b>Year</b>
1.	ESDIT – An approach for improving performance in MANET by detecting and isolating selfish nodes	2016
2.	Design and analysis of 128 bit area efficient carry select adder	2017
3.	Identification and Isolation of various attacks using enhanced AODV routing protocol for mobile adhoc network	2017

### **Guiding Ph. D Students – NIL**

### **Books Published No. :**

1. Co-author for chapter 3 titled “ Microprocessors and Interfacing Laboratory” of Electronics and Communication Engineering laboratory Manual series 2 with ISBN – 978-1-4276-5564-6 in the year 2016
2. Co-author for chapter 3 titled “Digital System Design and DICA Laboratory” of Electronics and Communication Engineering laboratory manual series with ISBN – 978-1-4276-5563-9 in the year 2016
3. Co-author for chapter 7 titled “Computer Architecture and Organization” of Electronics and Communication Engineering Instructional manual with ISBN – 978-1-4276-5539-4 in the year 2015.
4. Co-author for chapter 26 titled “Structural Digital Design” of Electronics and Communication Engineering Instructional manual with ISBN – 978-1-4276-5539-4 in the year 2015.

5. Co-author for chapter 3 titled “Digital Communications Laboratory” of Electronics and Communication Engineering laboratory Manual with ISBN – 978-1-4276-5536-3 in the year 2015

### **R&D and Consultancy**

<b>S. No</b>	<b>Project Title</b>	<b>Source of Funding</b>	<b>Duration</b>	<b>Role</b>	<b>Status</b>
1	IoT based e-health care system	In-house R & D	1 year	Investigator	Completed
2	Blockchain based Vehicle Rental System	In-house R & D	1 year	Investigator	Completed

### **Curriculum Design and Development**

1. Embedded Computing
2. Internet of Things related subjects

**Extra Curricular Activities:** Department level activities

### **Declaration**

I hereby declare that all the above-furnished information is correct to the best of my knowledge.

Date: 3-1-25

Place Gudlavalleru

Ramya P

Signature