## **FACULTY PROFILE**

## Name of the faculty G.RAMA KRISHNA

Department: Electronics and Communication Engineering

College: Gudlavalleru Engineering College

Phone No:

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### **Address for Communication**

G.Rama Krishna

S/o G.venkateswara Rao

Bommuluru, Gudivada mandal

Krishna district-521301

## **Academic Qualifications**

S. No	Name of the Degree (Starting from Ph.D to 10 <sup>th</sup> Class)	University	Percentage of Marks/Grade	Specialization	Year of Pass
1	M.Tech	NIT Calicut	7.89	Signal Processing	2010
2	B.Tech	JNTUH	72.8	Electronics and Communication Engineering	2007
3	Intermediate	Board of secondary education	92.1	-	2003
4	SSC	-	83.7	-	2001

### **Professional Experience**

			Working Period		
S. No	Designation	Institution Name	From	То	
1	Assistant professor	Scient Institute of engineering and technology	June 2007	May 2008	
2	Assistant professor	Gudlavalleru Engineering college	June 2010	Till date	

## **Professional Body Membership**

S. No	Name of the Professional body	Membership Number
1	Institution of Engineers	AM155945-4

### Papers Published in Journals No.:

- L.Sai Vineela, G.Tarun Ravi Sankar, K.Nohan Prasanth, K.Vamsidhar, G.Rama Krishna, "Skin Cancer Detection Using Region Based Segmentation" IJISET -International Journal of Innovative Science, Engineering & Technology, Vol. 6 Issue 4, April 2019.
- Sanapathi Tharangini, Gurajala Rama Krishna "SKIN CANCER DETECTION USING PARTICLE SWARM OPTIMIZATION" IJCRT, Volume 6, Issue 2, April 2018, ISSN: 2320-2882
- 3. D.Sandhya Rani,G.Ramakrishna "Tri state Tone Reservation, PTS and Companding Approach Based Multilevel PAPR Reduction in DWT-OFDM System" IJRECE Vol-5, Issue-4. July Aug, 2017
- 4. P.Venkatara rao, G.Rama krishna," Synchronization and channel estimation in higher order mimo ofdm systems" International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue: 09 | Sep-2016
- P.Prabhu justin, G.Rama krishna" Joint Beam Forming Power and Channel Allocation in Multi User and Multi Channel using Multiple Relay MIMO Cognitive Radio Networks" International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064, Volume 5 Issue 8, August 2016.
- 6. A.Siva parvathi and G.Rama krishna "A Novel based Cooperation and joint source- channel Transmission in wireless networks using LDPC," International journal of computer applications, volume 5,october 2014.
- 7. SK.Mastan and G.Rama krishna" IMPLEMENTATION OF POWER EFFICIENT RELAYING STRATEGY WITH HIGHER ORDER MODULATION USING MIMO SYSTEMS" International journal of computer applications,issue4, volume 5,september 2014.

- 8. R.sultana and G.Rama krishna"Digital Deliberation Boards and Signaling System in South Central Railways" International journal of computer applications, Volume 77 No.12, September 2013.
- K. Gafoor Raja, G. Ramakrishna" Wireless Control of Serpentine like Robot for Industrial Inspection and Surveillance" International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-2, Issue-3, July 2013
- 10. K.swarajya lakshmi, G.Rama krishna" optimization of FIR filter technique with BOOTH multiplier and delay buffer" Intenational journal of electronics and communications, vlo,21,november 2012
- 11. P.Lakshmi prasanna, G.Rama krishna" Diversity analysis in MIMO system using OSTBC "international journal of emerging technology & advanced engineering vol.2 issue-9,september 2012
- 12. N.B.S.Naveen, G.Rama krishna" Design and sinulation of multi channel UART for serial communication" International journal of Computer applications, (0975-8887), vol.52, august 2012.

#### Papers Published in Conferences No.:

1. K. jagadish kumar and G. Rama Krishna" IMPLEMENTATION OF A LOW COMPLEXITY REED SOLOMON DECODER FOR MODERN APPLICATIONS" International conference on information and communication technology, 18th February, 2012, Singapore.

### **Workshops Organized No.:**

1. Two day training program on ARM7 applications and programming

### **Workshops / Conferences / Seminars Attended No.:**

- 1. A webinar on "Radio frequency measurements for cellular and wireless communication systems" organized by Gudlavalleru engineering college on 25<sup>th</sup> may 2020
- 2. One day national convention on Research trends in wireless communication technology on 29<sup>th</sup> July 2017
- 3. One week faculty development program on signal and image processing using LABVIEW on 13-18 november 2017
- 4. Two day staff training program on MATLAB tools for engineers-hands on experience on 10<sup>th</sup> and 11<sup>th</sup> January 2017
- 5. One day workshop on research in energy management wireless networks and smart transportaation systems 29<sup>th</sup> march 2015
- 6. One day workshop on simulation of electronic circuits using LABVIEW 3<sup>rd</sup> february 2012
- 7. Two day ISTE workshop on Akash for Education 10-11 november 2012
- 8. One Week workshop on Training teachers for excellence 29-4 may 2013
- 9. Two week workshop on Analog Electronics 4-14 june 2013

- 10. Two week workshop on Signals and Systems 2-12 january 2014
- 11. Two day workshop on Issues in IC design 13-14 december 2013
- 12. Three day workshop on Theory & Applications of intelligent signal processing 28-2 march 2014
- 13. One day workshop on speech processing:current challaenges and hands on experience 23<sup>rd</sup> august 2014
- 14. One day workshop on ultra low power communication using CC430 microcontrollers 7<sup>th</sup> february 2015

### **Certifications/Training Programs Attended No.:**

- One week faculty development program on "Embedded system design" on 27<sup>th</sup>
   July to 1<sup>st</sup> August 2020
- 2. One week online knowledge development program on "Challenges and advancements in the design of IOT, Embedded and VLSI systems: A research view" organized by Gudlavalleru engineering college on 8<sup>th</sup> june to 13<sup>th</sup> june 2020
- 3. One week online faculty development program on "Artificial intelligence and its applications" organized by Ramachendra college of engineering on 25<sup>th</sup> May to 30<sup>th</sup> May 2020
- 4. One week online faculty development program on "Speech processing and its applications" organized by santhiram engineering college on 20<sup>th</sup> May to 25<sup>th</sup> May 2020
- 5. One week online faculty development program on "Advanced antenna design using HFSS" organized by santhiram engineering college on 12<sup>th</sup> May to 17<sup>th</sup> May 2020
- 6. One week online faculty development program on "Research challenges and opportunities post covid-19" organized by sri vasavi engineering college on 4th May to 9th May 2020
- 7. One week faculty development programme on "Machine learning applications in signal processing", organized by E&ICT academy NIT Warangal from 4<sup>th</sup> to 9<sup>th</sup> February 2019.
- 8. Two day training program on "Design and development of digital circuits using VLSI tools", organizes by Gudlavalleru engineering college from 6<sup>th</sup> to 7<sup>th</sup> December 2018.
- 9. One week faculty development program on "Communication and signal processing" on 29<sup>th</sup> October to 3<sup>rd</sup> November 2018
- 10. One week faculty development program on "Signal and image processing using LABVIEW" organized by Gudlavalleru engineering college on 13<sup>th</sup> to 18<sup>th</sup> November 2017
- 11. Two day faculty training program on "Advances in VLSI Design and Embedded systems" on 6-7 November 2017

- 12. Two day staff training program on "Simulation of Linear & Digital Integrated Circuits and Microcontroller based Applications" using NI Multisim organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 4-6 November 2016.
- One week Faculty Development Programme (FDP) on "Development of Wireless Sensor Networks Simulator (NS2) Hands on Experience", organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 1<sup>st</sup> 5<sup>th</sup> December 2015
- 14. One week refresher course on "Microprocessor & Microcontroller" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 17<sup>th</sup> 21<sup>st</sup> November 2015.
- 15. Two day Faculty Development Programme (FDP) on "Advanced Digital Signal Processing & Applications (ADSP-A)", organized by V.R. Siddhartha Engineering College, Vijayawada, under TEQUIP-II during 12<sup>th</sup> -13<sup>th</sup> September 2015.
- 16. 2 day training programmin on digital image processing using MATLAB 20<sup>th</sup> & 21<sup>st</sup> June 2015
- 17. Faculty development program on vlsi and embedded system design 7-8 july 2012
- 18. One week refresher course on pulse and digital circuits 21-26 november 2011
- 19. One day training program on MATLAB, Simulink & Related tool boxes for engineering education
- 20. One week refresher course on Electronic decices and circuits 23-28 september 2013

#### **Guest Lectures Delivered No.:**

- 1. "Underwater wireless sensor networks: reseach challenges" for faculty at Gudlavalleru Engineering College, Gudlavalleru on March 2011.
- 2. Delivered a lecture on the topic "Small signal analysis of single stage amplifiers" as part of One week refresher course on "Electroni devices& Circuits (Theory & Lab Practice)" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru.

## **Subjects Handled**

#### **Under Graduation**

- Computer Networks
- Optical communication
- Electronic Devices and Circuits
- Electronic Circuit Analysis
- Microwave Engineering
- Linear IC Applications
- Signals and Systems
- Transmission lines and waveguides

- Digital communications
- Satellite communications
- Microwave and optical communications
- Coding theory

#### **Post Graduation**

- Embedded System Design
- Internet Protocols
- Advanced Digital Signal processing
- Wireless Sensor Networks
- Optical communication networks

#### **Laboratories Handled**

#### **Under Graduation**

- Linear IC Applications Lab
- Electronic Devices & Circuits Lab
- EC&PDC lab
- Microwave and optical communication lab
- IC&PDC lab
- Electronic circuit analysis lab
- Electrical and Electronic lab
- Digital circuit design

## **Other Responsibilities**

### **College Level**

- 1. GENCES technical paper contest coordinator acadamic year 2014-15
- 2. GENCES technical paper contest coordinator acadamic year 2015-16
- 3. GENCES technical paper contest coordinator acadamic year 2016-17

#### **Department Level**

- 1. Alumni Coordinator acadamic year 2014-15, 2015-16,2016-17,2017-18,2018-19, 2019-20.
- 2. M.Tech PRC member for communication group
- 3. Lab incharge for Embedded system R&D laboratory
- 4. IE Faculty Advisor acadamic year 2012-13

# **Projects Guided**

## **Under Graduation**

S. No	Name of the project	Year
1	Fleet monitoring and speed control on arm	2010
2	Finger print based voting machine	2010
3	Multi purpose card using rfid technology for student information	2011
4	Ship detection with wireless sensor network	2013
5	A Novel Method of Image Restoration by using different types of Filtering Techniques	2014
6	A BID algorithm for blurred image restoration in the field of medical imaging	2015
7	Secure image transmission technique via secure- fragment-visible mosaic image and enhancing the visual quality	2017
8	Computer aided skin cancer detection	2018
9	Skin Cancer Detection Using Region Based Segmentation	2019
10	Skin Cancer Detection Using cluster Based Segmentation	2019
11	Skin Cancer Detection Using Region splitting and merging	2020
12	Gesture based home automation system	2020

### **Post Graduation**

S.No	Name of the project	Year
1	Implementation of a low complexity reed solomon decoder for modern applications	2012
2	Optimization of FIR filter technique with BOOTH multiplier and delay buffer	2012
3	Design and simulation of multi channel UART for serial communication	2012
4	Diversity analysis in MIMO system using OSTBC	2012
5	Digital Deliberation Boards and Signaling System in South Central Railways	2013
6	Implementation of power efficient relaying strategy with higher order modulation using mimo systems	2014
7	Wireless Control of Serpentine like Robot for Industrial Inspection and Surveillance	2013
8	Implementation of power efficient relaying strategy with higher order modulation using mimo systems	2014
9	A Novel based Cooperation and joint source- channel Transmission in wireless networks using LDPC,	2014
10	Joint Beam Forming Power and Channel Allocation in Multi User and Multi Channel using Multiple Relay MIMO Cognitive Radio Networks	2015
11	Synchronization and channel estimation in higher order mimo ofdm systems	2016
12	Tri state Tone Reservation, PTS and Companding Approach Based Multilevel PAPR Reduction in DWT-OFDM System	2017
13	skin cancer detection using particle swarm optimization	2018

### **Guiding Ph. D Students:NIL**

University	Year of Registration	Area	Status		
-	-	-	-		

#### **Books Published No.: 2**

- 1. Electronics & Communication Engineering Laboratory Manual (ISBN-978-1-4276-5536-3)
- 2. Electronics & Communication Engineering Instructional Manual (ISBN-978-1-4276-5539-4)

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

S. No	Project Title	Source of Funding	Duration	Role	Status
1					
2					

### **Curriculum Design and Development**

- 1. Analog circuits
- 2. Electronic Devices and Circuits
- 3. Analog circuits lab
- 4. Electronic devices and circuits lab
- 5. Advanced Digital signal processing
- 6. Multirate signal processing

### **Academic Rewards / Achievements: NIL**

### **Extra Curricular Activities**

1. Acted as BoS member for department of ECE, Gudlavalleru Engineering College, Gudlavalleru on  $2^{\rm nd}$  August 2014 and  $25^{\rm th}$  May 2015

### **Declaration**

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

Date:	Signature
Place:	( G.Rama krishna )