

## **FACULTY PROFILE**



### **T.S.R.Krishna Prasad**

Department: Electronics and Communication Engineering  
College: Gudlavalleru Engineering College  
Phone No: 08674-273737/273888 (O)

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### **Address for Communication**

S/O T.Venkateswara Rao  
H.NO:17-146,  
Mandapadu, Gudivada  
Krishna Dist, Andhra Pradesh-521301

### **Academic Qualifications**

S. No.	Name of the Degree	University	Percentage of Marks	Specialization	Year of Pass
1	(Ph.D.)	Acharya Nagarjuna University	-	Steganalysis (Signal Processing )	Pursuing
2	M.Tech	J.N.T.U. Hyderabad	76	Digital Electronics and Communication Systems	2008
3	B.Tech	Andhra University	68	Electronics and Communication Engineering	2002
4	Diploma	S.B.T.E.T. Hyderabad	85	Electronics and Communication Engineering	1998
5	S.S.C	S.S.C.Board	73	---	1995

## Professional Experience

S. No.	Designation	Institution Name	Working Period	
			From	To
1	Associate Professor	Gudlavalleru Engineering college, Gudlavalleru	Aug'2008	Till date
2	Assistant Professor	Gudlavalleru Engineering college, Gudlavalleru	June,2004	July,2008
3	Assistant Professor	Dr. Paul Raj Engineering college,Bhadrachalam.	Aug'2002	May, 2004

## Papers Published in Journals No. : 16

1. "Enhancing Audio Quality - Noise Cancellation with the LMS Algorithm", Indian Journal of Technical Education, Vol. 12, Issue 1, ISSN: 0971-3034, April 2024.
2. "Real Time Soil Monitoring Using Arduino", International Journal of All Research Education and Scientific Methods (IJARESM), Vol. 12, Issue 4, ISSN: 2455-6211, April 2024, pp.2122-2127.
3. "Drone Movement Detection Network using Raspberry Pi", International Journal of Innovative Science and Research Technology, Vol. 11, Issue 3, ISSN: 2456-2165, March 2023, pp.1765-1771.
4. "An Effect of Compressive Sensing on Image Steganalysis", International Research Journal of Engineering and Technology, Vol. 10, Issue 3, e-ISSN: 2395-0056, March 2023, pp.1111-1115.
5. "Image Steganography Using Compressive Sensing", International Journal of analytical and experimental modal analysis, Vol. XIV, Issue IV, ISSN: 0886-9367, April 2022, pp.1423-1435.
6. "Universal steganalysis towards higher detection accuracy", International Journal for Electronics Engineering, Vol. 10, Issue 02, ISSN: 0973-7383, June 2018- December 2018, pp.258-263.
7. "Universal Image Steganalysis using Feature Extraction through the Combinational Transforms", International Journal for Modern Trends in Science and Technology, Vol. 03, Issue 07, ISSN: 2455-3778, July 2017, pp.306-309.

8. "Hiding of Data in Images using Spread Spectrum Technique", IJCSITS, ISSN: 2249 – 9555, Page No.11-14, Volume 6, Issue 4, and August 2016.
9. "A Robust Image Steganography Embed and Extraction by Using Combinational Transform Technique in painting", IJARCSSE, ISSN: 2277 – 128X, Page No.329-333, Volume 5, Issue 12, and December 2015.
10. "Improved seamless cloning image in painting", IOSR-JVSP, e-ISSN: 2319 – 4197, Page No.38-45, Volume 4, Issue 5, and September 2014.
11. "Implementation of Digital Communication Laboratory on FPGA", IJARCCCE, ISSN: 2278 – 1021, Page No.4318-4322, Volume 2, Issue 11, and November 2013.
12. "Raspberry Pi for Commercial Applications", IJCT, ISSN: 2277 – 3061 Volume 11, Issue 2, Page No.2250-2255, and October 2013.
13. "Design and Implementation of Complex Floating point processor using FPGA", VLSICS, Vol.4, No.5, Page No.53-61, October 2013.
14. "An Efficient Reversible Design of BCD Adder", IJCTA, ISSN: 2229-6093, Vol.No.3, ISSUE:5, Page No.1699-1703,2012.
15. "Color Image Contrast Enhancement Using  $L^*a^*b^*$  Color space", IJEECS, ISBN: 0974-2166, Vol.No.9, ISSUE: 2, 2012.
16. "Disclosure of Hidden Messages Using Classifier Based on Stastical Moments of Wavelet Characteristic Function", IJECE, ISBN: 0974-2166, Vol.No.4, Page No.243-250, July-December 2011.

#### **Papers Published in Conferences No. :4**

1. "Efficient FPGA Implementation of AES Algorithm Well Suited for Embedded Applications", International Conference ICECE, Page No.289-292, 1st-2nd October 2011.
2. "Steganography-Security Through Images", Second International Conference RSPS, Page No.452-455,7-9th January 2010.
3. "Reconstruction of Signal with UnderSampling-Compressed Sampling", Second International Conference RSPS, Page No.532-535,7-9th January 2010.
4. "Design of Generalized Half Band Filters using Elliptic Approximation", National Conference FACE, Page No.30-33,19-21st March 2009.

### **Workshops /Conferences /Seminars Attended No. : 10**

1. Two day seminar on “Advancements in mobile communications” organized by Dept. of ECE,University college of engineering & technology, ANU, Guntur, during 24<sup>th</sup>-25<sup>th</sup> February, 2016.
2. One day workshop on “Research in Energy Management Wireless Sensor Networks &Smart Transportation Systems ”, organized by Institute of Engineers(India) ,Vijayawada local center, on 29<sup>th</sup> March , 2015.
3. One day seminar on “Research in Signal and Image processing on FPGA’s and Embedded Platforms” organized by Institute of Engineers(India) ,Vijayawada local center, on 22<sup>nd</sup> November , 2014.
4. One day workshop on “Speech processing: Current Challenges and hands-on Experience”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during on 23<sup>rd</sup> August 2014.
5. Three day workshop on “Theory&Applications of intelligent signal processing”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 28<sup>th</sup> February 2014 to 2<sup>nd</sup> March 2014.
6. Two week ISTE workshop on “Signals & Systems” conducted by Indian Institute of Technology Kharagpur from 2<sup>nd</sup> to 12<sup>th</sup> January 2014 (This workshop was held under the national mission on education through ICT (MHRD)).
7. Two day workshop on “Issues in Integrated Circuit Design”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 13<sup>th</sup> - 14<sup>th</sup> December ,2013.
8. Two week ISTE workshop on “Analog Electronics” conducted by Indian Institute of Technology Kharagpur from 4<sup>th</sup> to 14<sup>th</sup> June 2013 (This workshop was held under the national mission on education through ICT (MHRD)).
9. Two day ISTE workshop on “Aakash for Education” conducted by Indian Institute of Technology, Bombay from 10<sup>th</sup> to 11<sup>th</sup> November 2012 (This workshop was held under the national mission on education through ICT (MHRD)).
- 10.** Two day workshop on “Microwave Engineering Concepts and Lab Practice”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 9<sup>th</sup> - 10<sup>th</sup> June ,2012.

### **Online Certifications/Training Programs Attended No. :10**

1. AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" (Smart Contracts with Ethereum Solidity) Organized by Department of Electronics & Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 24<sup>th</sup>-29<sup>th</sup> August 2020.
2. A National Level Webinar on "Intellectual Property Rights & Patents - A View" organized by IQAC, Gudlavalleru Engineering College, Gudlavalleru held during 10<sup>th</sup>-12<sup>th</sup> August 2020.
3. AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" (Decentralized Network Synchronization) Organized by Department of Electronics & Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru, during 10<sup>th</sup>-15<sup>th</sup> August 2020.
4. Online National Level FDP on "Cyber Security" Organized by Department of Computer Science & Engineering and IT in association with CyberSpy, Gudlavalleru Engineering College, Gudlavalleru during 22<sup>nd</sup>-26<sup>th</sup> July 2020.
5. One week online Certificate Course on "Digital Teaching Techniques" Organized by ICT Academy during 29<sup>th</sup>-04<sup>th</sup> July 2020.
6. One week online Knowledge Development program on "Challenges and Advancements in the Design of IoT, Embedded and VLSI Systems: A Researchers View" Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 8<sup>th</sup>-13<sup>th</sup> June 2020.
7. One day webinar online training program on "Impact of COVID in Engineering Education & Way forward" Organized by Indian Society for Technical Education (ISTE) Chapter, Gudlavalleru Engineering College, Gudlavalleru on 09<sup>th</sup> June 2020.
8. Two week online Faculty Development program on "Internet Of Things (IoT)" Organized by Andhra Pradesh State Skill Development Corporation (APSSDC) during 18<sup>th</sup>-30<sup>th</sup> May 2020. .
9. One day webinar online training program on "Radio Frequency Measurements for Cellular and Wireless Communication Systems" Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 25<sup>th</sup> May 2020.
10. One day webinar online training program on "Speech Signal Processing" Organized by Department of Department of Computer Science and Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram on 17<sup>th</sup> May 2020.

## **Certifications/Training Programs Attended No. :22**

1. One week Faculty Development program on "Applications of Computer Vision using Deep Learning" Organized by Department of Electronics and Communication Engineering, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru during 20<sup>th</sup> -25<sup>th</sup> February 2023.
2. Two day Faculty training program on "Full Custom IC Design using CADENCE Software Tools " Organized by Department of Electronics and Communication Engineering, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru during 4<sup>th</sup>-5<sup>th</sup> August 2022.
3. Three day training program on "Advanced Development Tools Based IoT" Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 11<sup>th</sup>-13<sup>th</sup> November 2019.
4. One week short term training program through ICT mode on "Evaluating Students' Performance and Designing Question Papers" Organized by National Institute of Technical Teachers' Training and Research,Kolkata in Gudlavalleru Engineering College, Gudlavalleru during 25<sup>th</sup> February-01<sup>st</sup> March 2019.
5. One week Faculty Development program on "Machine Learning Applications in Signal Processing" Organized by the E&ICT Academy, National Institute of Technology, Warangal at Gudlavalleru Engineering College, Gudlavalleru during 04<sup>th</sup> – 09<sup>th</sup> February, 2019.
6. Two day training program on " Design and Development of Digital Circuits using VLSI Tools" organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 6<sup>th</sup>-7<sup>th</sup> December 2018.
7. One week Faculty Development program on "Communications and Signal Processing" Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 29<sup>th</sup> October-03<sup>rd</sup> November 2018.
8. One week national level Faculty Development program on "Signal and Image Processing using Labview" Organized by Signal Processing Group of Department of Electronics and Communication Engineering in association with NI Systems Pvt. Ltd. during 13<sup>th</sup>-18<sup>th</sup> November 2017.

9. Two day faculty training program on “Advances in VLSI Design and Embedded Systems” Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 6<sup>th</sup>-7<sup>th</sup> November 2017.
10. Two day staff training program on “MATLAB TOOLS FOR ENGINEERS-HANDS ON EXPERIENCE” Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 10<sup>th</sup>-11<sup>th</sup> January 2017.
11. One week Faculty Development program on "Hands on Experience in Signal Processing applications using NI Multisim” Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 7<sup>th</sup>-12<sup>th</sup> November 2016.
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 during 4<sup>th</sup>-5<sup>th</sup> November 2016.
13. Three day national level Faculty Development Program on “Emdedded Systems”, organized by SAMVID,ECE Association, Organized by Department of Electronics and Communication Engineering, Chalapathi Institute of Engineering and Technology, Guntur during 3<sup>rd</sup>- 5<sup>th</sup> Octoberber,2016.
14. A one week Faculty Development Program on “Development of Wireless Sensor Networks using Network Simulator (NS2)- Hands on Experience”, Organized by Communication Research group in association with Vertex soft,Hyderabad ,Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 1<sup>st</sup>- 5<sup>th</sup> December,2015.
15. One week refresher course on “Microprocessors &Microcontrollers”, Organized by R&D Center, Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 17<sup>th</sup> - 21<sup>st</sup> November, 2015.
16. Two day training program on “Digital Image Processing using MATLAB” Organized by Computer Centre, MIT Campus, Anna University, Chennai during 20<sup>th</sup>-21<sup>st</sup> June ,2015.
17. One week refresher course on “Electronic Devices and Circuits”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 23<sup>rd</sup>- 28<sup>th</sup> September ,2013.
18. Two day training program on “MATLAB, SIMULINK & Related Tool Boxes for Engineering Education” Organized by Math Works at Gudlavalleru Engineering College 3<sup>rd</sup>-4<sup>th</sup> April ,2013.

19. Two day Faculty Development Program on “VLSI and Embedded System Design”, Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 7<sup>th</sup>- 8<sup>th</sup> July,2012.
20. One week refresher course on “Pulse& Digital Circuits”, Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 21<sup>st</sup>- 26<sup>th</sup> November 2011.
21. Five day training program on “Mentor Graphics (Front End and Back end) and Xilinx Tools” Organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 13<sup>th</sup>- 17<sup>th</sup> September 2010.
22. Two week staff Development Program on “Current Trends in Biometrics”, Organized by Department of Information Technology, Gudlavalleru Engineering College, Gudlavalleru during 2<sup>nd</sup>- 14<sup>th</sup> November 2009.

## **Subjects Handled**

### **Under Graduation**

- Signals & Systems
- Digital Signal Processing
- Digital Image Processing
- PTSP
- Embedded and Real time Operating System
- MPMC
- Analog Communication
- Digital Communication
- Data Communication systems
- Wireless Communication and Networks
- Wireless Sensor Networks
- Bio medical Engineering

### **Post Graduation**

- Digital System Design
- VHDL Modeling of Digital Systems
- Network Security and Cryptography
- Advanced Digital Signal Processing
- Advanced Embedded Systems

## **Labs Handled**

### **Under Graduation**

- DSP LAB



- AC LAB
- DC LAB
- EDC LAB
- PDC LAB
- MWOC LAB
- MPMC LAB
- ECAD LAB
- DCD LAB

#### **Post Graduation**

- ASP LAB

### **Other Responsibilities**

#### **College Level**

1. CIS 5 coordinator
2. EPABX Coordinator

#### **Department Level**

1. NBA Coordinator for criteria 3
2. Department website coordinator

### **Projects Guided**

#### **Under Graduation**

<b>S. No.</b>	<b>Name of the project</b>	<b>Year</b>
<b>1</b>	DRONE MOVEMENT DETECTION NETWORK USING RASPBERRY PI	22-23
<b>2</b>	IMAGE STEGANALYSIS USING COMPRESSIVE SENSING	22-23
<b>3</b>	IMAGE STEGANOGRAPHY USING COMPRESSIVE SENSING	21-22
<b>4</b>	IMAGE DEHAZING BY THE USE OF MULTILAYER PERCEPTRON	21-22

<b>5</b>	EVALUATION OF QUALITY OF FOOD GRAINS	20-21
<b>6</b>	FAKE CURRENCY DETECTION USING IMAGE PROCESSING	20-21
<b>7</b>	COMPRESSIVE SENSING BASED FEATURE RESIDUE FOR IMAGE STEGANALYSIS DETECTION	18-19
<b>8</b>	BLIND IMAGE STEGANALYSIS FOR JPEG IMAGES	18-19
<b>9</b>	DETECTION OF FAKE CURRENCY USING IMAGE PROCESSING	17-18
<b>10</b>	STEGANALYSIS FOR LSB STEGANOGRAPHY	17-18
<b>11</b>	DUPLICATE DOCUMENT DETECTION USING IMAGE PROCESSING	16-17
<b>12</b>	MULTI BIT QUANTIZATION INDEX MODULATION - A HIGH RATE ROBUST DATA HIDING METHOD	15-16
<b>13</b>	A ROBUST SPREAD SPECTRUM TECHNIQUE FOR DATA HIDING	14-15
<b>14</b>	DIGITAL DATA HIDING IN IMAGES USING WAVELET TRANSFORMS	14-15
<b>15</b>	LASER BASED AUDIO SYSTEM	13-14
<b>16</b>	FARMER FRIENDLY IRRIGATION SYSTEM	11-12
<b>17</b>	CARDIAMEDICAL IMAGE SEGMENTION MONUMENTROPY METHOD	11-12
<b>18</b>	AUDIO DENOISING BY TIME-FREQUENCY BLOCK THRESHOLDING	10-11
<b>19</b>	RECONSTRUCTION OF UNDERWATER IMAGE BY BISPECTRUM	10-11
<b>20</b>	STEGNOGRAPHY OF IMAGES	10-11
<b>21</b>	INTELLIGIENT SPY ROBO FOR TEMPERATURE CONTROL	09-10
<b>22</b>	SPEAKER IDENTIFICATION SYSTEM USING TESPAR TECHNIQUE	08-09
<b>23</b>	WAVELET BASED IMAGE COMPRESSION USING SPIHT ALGORITHM	08-09

<b>24</b>	RAILWAY MAILING SYSTEM	07-08
<b>25</b>	THE CONTOURLET TRANSFORM : AN EFFICIENT DIRECTIONAL MULTIREOLUTION IMAGE REPRESENTATION	07-08
<b>26</b>	SIMULATION OF RAYLEIGH FADING CHANNEL USING PI/4 DQPSK	05-06

#### **Post Graduation**

<b>S.No.</b>	<b>Name of the project</b>	<b>Year</b>
1	UNIVERSAL STEGANALYSIS TOWARDS HIGHER DETECTION ACCURACY	2018
2	UNIVERSAL IMAGE STEGANALYSIS USING FEATURE EXTRACTION THROUGH THE COMBINATIONAL TRANSFORMS	2017
3	HIDING OF DATA IN IMAGES USING SPREAD SPECTRUM TECHNIQUE	2016
4	A ROBUST IMAGE STEGANOGRAPHY USING COMBINATIONAL TRANSFORMATION TECHNIQUE	2015
5	IMPROVED SEAMLESS CLONING OF IMAGE INPAINTING	2014
6	IMPLEMENTATION OF DIGITAL COMMUNICATION LABORATORY ON FPGA	2013
7	DESIGN AND IMPLEMENTATION OF COMPLEX FLOATING POINT PROCESSOR USING FPGA	2013
8	RASPBERRY PI FOR COMMERCIAL APPLICATION	2013
9	COLOR IMAGE CONTRAST ENHANCEMENT USING L*A*B COLOR SPACE	2012
10	AN EFFICIENT REVERSIBLE DESIGN OF BCD ADDER	2012
11	STEGANALYSIS OF IMAGES	2011
12	VLSI IMPLEMENTATION OF HIGH RESOLUTION TIME-TO-DIGITAL CONVERTER	2010

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

S. No.	Project Title	Source of Funding	Duration	Role	Status
1	Digitalized Smart college Bus tracking System (Consultancy)	S.V. Technologies, Vijayawada	2 Years	Co-Investigator	Completed

### **Books Published No. : 4**

1. Co-author for chapter 3.1 titled “Digital Communication Lab” 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 4.1 titled “Digital Communication Lab” of Electronics and Communication Engineering laboratory manual series with ISBN – 978-1-4276-5563-9 in the year 2016
3. Co-author for chapter 5 titled “Analog Communication” of Electronics and Communication Engineering Instructional manual with ISBN – 978-1-4276-5539-4 in the year 2015.
4. Co-author for chapter 5.2 titled “Microwave & Optical Communication Lab” of Electronics and Communication Engineering laboratory Manual with ISBN – 978-1-4276-5536-3 in the year 2015.

### **Curriculum Design and Development**

1. PTRV
2. ANALOG COMMUNICATION
3. ASP LAB

### **Extra Curricular Activities**

- Enacted as BoS member for the Autonomous curriculum design of Electronics and Communication Engineering at Gudlavalleru Engineering College, Gudlavalleru on 2<sup>nd</sup> August 2014 and 25<sup>th</sup> May 2015.

### **Declaration**

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

Date:

Signature

Place:

( T.S.R.KRISHNA PRASAD )