Name : **Dr.Vasagiri KrishnaSree** 

Designation: Associate professor

Department:ECE

Mail.ID: krishnasree\_v@vnrvjiet.in

Experience (in years): Teaching: 25 Research:10 Industry: 10

# 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of	Specialization
		passing	
1	B.Tech.	1985	ECE
2	M.Tech.	2003	DSCE
3	Ph.D.	2020	Image processing

### 2. Teaching and Learning:

- 2.1. Teaching Interests: Electronic devices and circuits, Electronic circuit analysis, Linear and Digital IC applications, EDA TOOLS, Analog communications, Satellite communications, Digital signal processing and digital image processing.
- 2.2 Novel Teaching & Learning Techniques adopted: WIT &WIL, TED videos, POGIL activities, Quiz, Learning by doing, PPT, Group discussion.
- 2.3 Involvement in curriculum updating / Design: In syllabus framing, updating the syllabus, framing of Cos

# 3. Co-curricular and Extra-Curricular Activities

- 3.1.Interests and Hobbies:
- To work hard
- To work sincerely
- Book reading
- Fabric painting
- 3.2. CCA/ECA Organized:
  - Arranged guest lecturers under ECE ASSOCIATION
  - Conducting I Year Interaction programmes and IV year Farewell programmes since 8 years
  - Conducted various programmes like Technical quiz, Sudoku contest, Puzzlecontest, C Language programming contest etc
  - Conducted social service programmes for orphanage center at kukatpallyunder 'VNRSF service oriented student society'.
  - Distributed homeo medicine for swine flu at Bachupalli village under 'VNRSF service oriented student society'.
  - Collected essential things rice, grams, floor, oil, clothes etc and distributed at a village near

Vizag during the floods under 'VNRSF service oriented student society'.

- Participated in Republic parade at VNRVJIET under 'VNRSF service oriented student society'
- 3.3. CCA/ECA participated:
- 3.4. Counseling and Mentoring Activity: Mentoring 40 students
- 3.5. Committees involved in:

Department level:

- Member Board of studies ECE department
- Member department academic committee
- Faculty coordinator for industrial mini projects and Main projects
- Faculty coordinator, for ECE Association.



• Mentor for final year students

Institute Level:

- Coordinator –Admissions since 6 years
- Member, EDUPRIME automation Committee- Admission module
- Faculty coordinator, for IETE Professional society.
- Faculty coordinator, for VNRSF student social service organization.

## 4. Conference / Workshop / Seminar / Guest Lectures:

#### 4.1.Conducted:

- ASIC Design flow using industry standards, 21-27<sup>th</sup> August 2014
- Wireless sensor node design, December 2014
- FDP on "Trends in Wireless communication technology and Evolution of simulation tools", 11-23 May 2015.
- IACC-2017, 5-7, jan2017, IEEE, International conference

#### 4.2. Attended:

- Short term course on VLSI DESIGN AND TECHNOLOGY at JNTU campus, Kukatpally in 2003
- Short term course on DIGITAL IMAGE PROCESSING at GNIT Hyderabad in 2008
- Workshop on SIGNAL AND IMAGEPROCESSING at IIIT Hyderabad in 2009
- $\bullet$  Faculty development programme on Real time signal and image processing at VNRVJIET in 2011
- Faculty development programme on VLSI SYSTEM DESIGN at VNRVJIET in 2012
- Faculty development programme on Analog system design using ASKLV kits at VNRVJIET in 2012
- Faculty development programme on Pogil activities at VNRVJIET in 2013
- Faculty development programme on E-content learning and development at VNRVJIET in 2013
- Faculty development programme on 'Art of teaching' at VNRVJIET in 2013
- ASIC Design flow using industry standards, 21-27<sup>th</sup> August 2014, at VNRVJIET
- Wireless sensor node design, December 2014-2015, ,at VNRVJIET.
- ITRA Sponsored 4 Day National Level Workshop on "Bio-Medical Signal Processing & its Applications", 13<sup>th</sup> to 16th Dec 2016
- Attended FDP on "IMAGE PROCESSING and MACHINE LEARNING" conducted by CBIT

#### 5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures:
  - Participated as resource person in Faculty development programme on Real time signal and image processing at VNRVJIET in 2011
  - Participated as resource person in workshop of Convergence 2011 on communication and signal processing at VNRVJIET in 2011
  - Participated as resource person in workshop of Convergence 2012 on Applications of Image and signal processing at VNRVJIET in 2012
  - Participated as resource personinAICTEsponsored Faculty development programme "VLSIsystem design", on 'Introduction to VERILOG HDL' at VNRVJIET in 2013.
  - Participated as resource personin Preconference talk on 'Applications of Image processing' at Vignan institute of technology and science, Deshmukhi village in 2013.
- 5.2. Articles/Chapterspublished inBooks:

Books published as single author or as editor:

• Published one Text book on 'Digital Electronics' for diploma students.

- Published one Text book on 'Digital Electronics and Computer Architecture' for diploma students.
- Published one text book on 'Communication systems' for diploma students.
- Published one Text book on 'Advanced communications' for diploma students.
- Delivered a webinar on IC fabrication as a part of RTL designing and verification webinar series conducted by ECE dept of VNRVJIET.
- 5.4. Projects Guided:
  - a) UG:53
  - b) PG:21
- 5.5. Research Interests: Electronic devices and circuits, Circuit analysis, Linear and digital IC applications, EDA TOOLS, Analog communications, Control Systems, Satellite communications, Digital signal processing and digital image processing, Image and video processing.
- 5.6. Ph.D students:
  - a) Enrolled: Nilb) Submitted:Nilc) Awarded:Nil
- 5.7. Papers published in reviewed Journals:

S.N o	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citatio n Index	National/ International
1	Implementation of Image Classification Using PIC Microcontroller PIC16F877 and DSP Processor TMS320C6713 in real time	ISOI Journal no.4,vol.38.,pp20 7-210	Not available	Not known	National
2	A Real Time Improved Driver Fatigue Monitoring System	Transactions on signal processing, WSEAS publications	Print ISSN: 1790-5052 E-ISSN: 2224-3488	H Index: 9	International
3	Dorsal Hand Vein pattern authentication by Hadamard transform	Advances in computer science and engineering, Vol 13, PP 51-64	ISSN: 0973- 6999	3.298	International
4	Auto detection of blood vasculature using improved directional optimal filter	International journal of emerging technologies and applications in engineering, volume 5, page 85-5	ISSN 2250- 2459(Online )	2.324	International
5	Auto detection of optic nerve head using improved	Int. J. Medical Engineering and Informatics, Vol.	ISSN: 17550661, 17550653	H Index: 4	International

	directional optimal	4, No. 2, pp 157-			
	filter	164 Research Journal	ISSN:	Н	
6	Principal Component Analysis of Thermal Dorsal Hand Vein Pattern Architecture	of Applied Sciences, Engineering and Technology, vol 4(24), pp 5375- 5380	20407467, 20407459	Index: 7	International
7	Dorsal Hand Vein pattern authentication by Hough peaks	International Journal of Research in Engineering and Technology, vol 3, PP 16-22,4 years	ISSN: 2319 1163	1.32	International
8	A FPGA Implementation on skin cancer detection using TDLS algorithm	International Journal of advanced research in ectrical,electronic s and instrumentation engineering (IJAREEIE)	ISSN:2320- 3765	5.621	International
9	Modbus enabled zigbee wireless sensor network for better interactive industrial automation	International journal of information and technologies	vol.4(1- 2),2011, pp 73-78.		International
10	Implementation of rice grain quality testing on FPGA using image processing	International journal of science and engineering research	Vol.7, Issue 12,Decembe r 2016		International
11	FPGA Implementation of Image Enchanment Algorithm for Biomedical Image Processing	International Journal of Biomedical Engineering and Consumer Health Informatics	Nov 2013, Vol 2.		International
12	Survey on Image Compression Techniques and IOT Challenges	CiiT International Journal of Digital Image Processing	Vol 9, No 3, March 2017 0974-9691		International
13	Suitable image retrieval for IOT application	International Journal of Recent Innovation in	Volume: 02 Issue: 08 August –		International

		Engineering and	2017		
		Research	(IJRIER)		
	FPGA	International	Volume: 02		International
	Implementation of	Journal of Recent	Issue: 08		
14	Pixel-Level Color	Innovation in	August –		
	Image Fusion	Engineering and	2017		
		Research	(IJRIER)		
	Image based street	ARPN journal of	Vol.13,		International
15	light block out	engg and applied	issue 14,		
	monitoring	sciences	July 2018		
	Signal processing	International	Volume 8,		International
	techniques for	journalof	issue-		
16	removal of various	innovative	12,October-		
10	artifacts from	technology and	2019, 430-		
	obstructive sleep	exploring	435		
	apnea signal	engineering			
	Various Real time	International	Volume-8		International
	Chat bots and their	Journal of Recent	Issue-4,		
	Applications in	Technology and	November		
17	Human life	Engineering	2019		
		(IJRTE) Volume-			
		8 Issue-4,			
		November 2019			
	Smart Wrist Band	International	Volume-9		International
	for Women Safety	Journal of	Issue-8,		
		Innovative	June 2020,		
18		Technology and	pp630-632		
		Exploring			
		Engineering			
	D 1 ' C	(IJITEE)	X7.1. (2)	G	T
	Reduction of storage	Solid State	Volume: 63	Scopus	International
	and transmission	Technology	Issue: 6	0.11	
19	requirements in IoT		Publication		
	- Using Video		Year:		
	Compression		2020 ,pp201		
	Daview or Verieus	Journal of	30-20136	UGC	Intermeticanal
	Review on Various		December 2021,	UGC	International
	Approaches of Automatic Drip	Electronics and			
20	1	Informatics	Volume 3, Issue 4,		
	Irrigation Systems for smart				
			Pages 263-		
5 0 D	Agriculture		276		

5.8. Papers presented at National / International conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Content based image retrieval based on shape and colour for food	National conference on	National	December 4-5, 2009

	classification	signal processing and		
2	Content based image retrieval based on colour and texture for automatic classification	National conference on signal processing and	National	March 17- 18, 2012
	Digital security with Thermal	communication International	International	August
3	Dorsal Hand Vein patterns Using Morphological Techniques	conference on Power Electronics Instrumentation Engineering		August, 2012
4	Simulink Based Accident Aversion System	International National conference on CIIT	International	December, 2012,
5	Multiple feature extraction in retinal blood vasculature	International National conference on Advanced computing	International	2 <sup>nd</sup> - 3 <sup>rd</sup> August, 2012,
6	Hardware implementation of enhanced retinal fundus images using Simulink	International conference PRIMEASIA- 2013	International	December- 2013
7	Diagnosis of ophthalmologic disorders in retinal fundus images	International National conference ICADIWT	International	February 2014
8	Dorsal hand vein Biometric authentication using Complex Walsh transform	ICATCCT-2016 SBJIT, Bengalore	International	July 21-23 2016
9	IOT Based Domestic Aid Using Computer Vision for Specially Abled Persons	International Conference on Communications, Signal Processing and VLSI (IC2SV2019)	International	OCT 23rd - 24th, 2019
10	Text/sign board reading aid for visually challenged people	International Conference On Smart Trends In Computing And Communications	International	December 17- 18,2021
11	Leaf Illness Prediction for Smart Agriculture	International Conference on Advances in Signal Processing	International	Mar 30- 31, 2022

		and Communication – SPC2022,	
<b>-</b> 0 0	1 1 5 1 3 7 1		

5.9. Sponsored research Projects: Nil

S.No	Title	Agency	Period	Grant amount	Ongoing /
					Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
1	Testing and Design Validation of loT products used in the Smart Home automation projects of Blaze Automation	M/S BLAZE Automation		6 Lakhs	Ongoing

**6. Awards / Honors received:** 100% results in image processing for the AY 2015-16 100% results in image and video processing for the AY 2017-18 100% results in image and video processing for the AY 2018-19

7. Motto: Honesty & Hard work