# **FACULTY PROFILE**

## Name of the faculty Thota. Venkata Lakshmi

Department: Electronics and Communication EngineeringCollege:Gudlavalleru Engineering CollegePhone No:08674 - 273737, 273888 (O)Mobile:+91-9441756981E-Mail:tvlthota@gmail.com



## **Residential Address**

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D. No: 4-11, Behind corporation bank, Near P.A.C.S Office, Gudlavalleru- 521 356.

# **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.	Ph. D	JNTUK, Kakinada		Low Power VLSI Design	Pursuing
2.	M. Tech.	JNTUK, Kakinada	80.5%	Instrumentation & Control Systems	2008
3.	B. Tech.	ANU, Guntur	73%	Electronics and Communication Engineering	2002
4.	Diploma	K. E. S Polytechnic, Vijayawada	76%	DECE	1999

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5.	S.S.C	B.S.E Hyderabad	74%		1996
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## **Professional Experience**

		<b>H</b>	Working Period	
S. No	Designation	Institution Name	From	То
1.	Associate Professor	Gudlavalleru Engineering College, Gudlavalleru	Feb 2009	Till date
2.	Assistant Professor	Gudlavalleru Engineering College, Gudlavalleru	August 2003	January 2009

## **Projects Guided**

Ph.D	Post Graduation	Under Graduation	
	12	25	

#### **Specialization**

Low Power VLSI Design

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

- 1. Electronics & Communication Engineering Laboratory Manual
- 2. Electronics & Communication Engineering Instructional Manual

## Papers Published in Journals No. : 10

- Surapaneni Aparna, T. Venkata Lakshmi, M.Kamaraju, Y. Sri Chakrapani, "Implementation of Deep Learning Accelerator Unit", International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol.8, Issue:7 July-2019.
- Pallavi Sesham, Venkatalakshmi Thota, Kamaraju M, "Design Of Kogge-Stone Adder Using Adiabatic Logic", International Journal of Advances in Electronics and Computer Science, ISSN: 2393-2835 Volume-5, Issue-6, Jun.-2018.
- S.Pallavi, T.Venkata Lakshmi, M. Kamaraju, "Implementation and comparative analysis of Carry Select Adder using Kogge-Stone Adder in Adiabatic logic" Journal of Engineering Research and Application, UGC approved Journal Research article, ISSN : 2248-9622, Vol. 8, Issue 6 (Part - III) June 2018, pp 22-26.

- G.Rajesh, T.Venkata Lakshmi, M.Kamaraju, "Low Power VLSI implementation of error detection and correction codes using OLS codes" International Journal of Computer Science and Information Technology & Security (IJCSITS), ISSN: 2249-9555 Vol.6, No.4, July-August 2016.Impact Factor:3.765.
- V. Sreelakshmi, T. Venkata Lakshmi, M. Kamaraju "A Low-power Delay buffer using Ring counter and Gateddriver" International Journal of Engineering & Science Research (IJESR), Vol-5, Issue-12, ISSN: 2277-2685, Dec. 2015, pp: 1447-1455.
- A. Haritha, Y. Bhavani Prasad, M. Kamaraju, T. Venkata Lakshmi "Analysis of Memristors with and without Temperature Effects" International Journal of Applied Engineering Research (IJAER), Volume-10, number-20, ISSN: 0973-4562, 2015, pp: 41464-41470.
- 7. I. Srivalli, **T. Venkata Lakshmi**, M. Kamaraju "Design of an Efficient Router in Networks" International Journal of Engineering in Advanced Research Science and Technology (IJEARST), Volume-01, issue-01, October 2015.
- Sravanthi, T. Venkata Lakshmi "VLSI Implimentation of ALU using Reversible Logic with Vedic Mathematics" International Journal of Scientific Engineering and Technology Research (IJSETR), Volume. 04, Issue. 01, ISSN: 2319-8885, January-2015, pp: 0142-0146.
- P.V. SubbaRao, T. Venkata Lakshmi, M. Kamaraju, "A Novel Voting System Using SMS" International Journal of Computer Science & Information Technology (CS & IT) (DOI: 10.5121/csit.2013.3634), August 2013, PP: 297-303. Impact factor: 2.93.
- J. Tulasi, T. Venkata Lakshmi, M. Kamaraju, "FPGA Implementation of Convolution Encoder and Hard Decision Viterbi Decoder" International Journal of Computer Communication Technology (IJCCT), Volume-3, Issue-4, ISSN (online): 2231-0371, 0975-7449, 2012.

#### Papers Published in Conferences No.: 09

- 1. Surapaneni Aparna, Y. Sri Chakrapani, **T. Venkata Lakshmi**, M.Kamaraju, "A Survey of VLSI Architectures for Hamming Code Algorithms, International Journal of Advanced Scientific Research and Management, CITAES-18, ISSN:2455-6378.
- 2. Ch.S.DayaAdarsh, T.Venkata Lakshmi, M.Kamaraju "Implementation and Comparative Analysis of Double Gate Low Power Multiplexers Using Dynamic Logic Styles", International Conference on Electronics, Communication and Aerospace Technology, ICECA 2017, IEEE Xplorer April 2018, DOI: 10.1109/ICECA.2017.8212825.Pallavi Sesham, Venkatalakshmi Thota, Kamaraju M, "Design Of Kogge-Stone Adder Using Adiabatic Logic", National Conference on Advances in Electrical, Electronics & Computer Engineering (NCAEECE) in association with IRAJ Research Forum and Institute of Research and journals (IRAJ), April 2018.
- 3. **T. Venkata Lakshmi**, R. Trinadh, "A novel design of Area and Power Efficient high speed data path logic system", International conference on Systemics, Cybernetics and

Informatics (ICSCI-2014), under the aegis of Pentagram Research Centre, India in association with IEEE Hyderabad section during 3<sup>rd</sup>-6<sup>th</sup> February 2014, pp:75-78.

- 4. **T. Venkata Lakshmi**, M. Kamaraju, P.V. Subba Rao "A Novel Implementation of Voting System using SMS", International Conference on Signal, Image Processing and Pattern Recognition (SIPP-2013) at Bangalore during February 18-19, 2013.
- 5. M. V. Phani Kumar, **T. Venkata Lakshmi**, "Impulse noise removal from color image sequences using Fuzzy Filter", of International conference on Computer Science and Information Technology (CSIT-2012) at Bhopal on 3<sup>rd</sup> February 2012, pp-41-47.
- Jayaprakash.P, A.Mallaiah, T. Venkata Lakshmi, "VLSI Implementation for Basic ARPS Algorithm for Video Compression", International conference on Technology and Innovation (ICTI-2011), Chennai on 26<sup>th</sup> July 2011.
- R. Trinadh, T. Venkata Lakshmi, "Enhanced Feature sets for face recognition under difficult lighting conditions", International conference on Nanoscience, Engineering & Advanced Computing (ICNEAC-2011), pp : 64-69 at Narsaraopet during July 8-10, 2011.
- 8. Ravi Kumar K, **T. Venkata Lakshmi**, "Implementation of Image fusion algorithm based on wavelet transform and curvelet transform for improved quality factors", International Conference on Nanoscience Engineering & Advanced computing (ICNEAC-2011) at Narsaraopet during July 8-10, 2011.

# Workshops Organized No. : 02

- 1. One week ISTE STTP on "CMOS, Mixed Signal and Radio Frequency VLSI Design", organized by IIT Kharagpur under the MHRD from 30<sup>th</sup> January-4<sup>th</sup> February, 2017.
- Two day training programme on "Advances in VLSI Design and Embedded Systems" organized by VLSI & Embedded Systems Research group, department of ECE during 31<sup>st</sup> August and 1<sup>st</sup> September, 2017.

# Workshops /FDPs/STTPs/Training Programs/Seminars Attended: 33

- 1. One week FDP on "**Data Acquisition and RT using LabVIEW**" organized by ECE Department Gudlavalleru Engineering College, Gudlavalleru in Association with National Instruments, Bangalore from 11<sup>th</sup> to13<sup>th</sup> November, 2019.
- 2. A three day training program on "Advanced Development Tools Based IoT" organized by ECE Department, Gudlavalleru Engineering College, Gudlavalleru from 11<sup>th</sup> to13<sup>th</sup> November, 2019.
- 3. Attended a 12 week NPTEL-AICTE FDP on "Microelectronics: Devices to Circuits" during July-November, 2019.

- 4. Attended a 8 week NPTEL-AICTE FDP on "CMOS Digital VLSI Design" during February-April, 2018.
- Two day training programme on "Advances in VLSI Design and Embedded Systems" organized by VLSI & Embedded Systems Research group, department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 31<sup>st</sup> August and 1<sup>st</sup> September, 2017.
- 6. Short course on "Modeling and Simulation of Nano-Transistors" organized by Department of Electrical Engineering, IIT Kanpur during 13<sup>th</sup> -17<sup>th</sup> February, 2017.
- One week National Level FDP on "Signal and Image Processing using LabVIEW" during 13<sup>th</sup> -18<sup>th</sup> November, 2017 organized by Signal Processing Research group of department of ECE, Gudlavalleru Engineering College, Gudlavalleru in association with NI Systems Pvt. Ltd.
- A one week faculty development programme on "Hands on experience in Signal Processing Applications" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru from7<sup>th</sup> -12<sup>th</sup> November, 2016.
- 9. A one week faculty development programme on "Development of Wireless Sensor Networks using Network Simulator (NS2)- Hands on experience" organized by Communications Research group, department of ECE, Gudlavalleru Engineering College, Gudlavalleru in association with Vertex Soft, Hyderabad from1<sup>st</sup>-5<sup>th</sup> December, 2015.
- One week ISTE STTP for co-ordinators on "CMOS, Mixed Signal and Radio Frequency VLSI Design" conducted by IIT Kharagpur under the MHRD from19<sup>th</sup>-23<sup>rd</sup> September, 2016.
- Thirty second National Convention of Electronics and Telecommunication Engineers and National seminar on "Intelligent System for More Connected World: Internet of Things" organized by The Institution of Engineers (India), Andhra Pradesh State Centre during 24<sup>th</sup> -25<sup>th</sup> October, 2016.
- 12. A one week faculty development programme on "Development of Wireless Sensor Networks using Network Simulator (NS2)- Hands on experience" organized by Communications Research group, department of ECE, Gudlavalleru Engineering College, Gudlavalleru in association with Vertex Soft, Hyderabad from1<sup>st</sup>-5<sup>th</sup> December, 2015.
- 13. One week refresher course on "Microprocessors & Microcontrollers" organized by Research & Development center, department of ECE, Gudlavalleru Engineering College, Gudlavalleru, during 17-21 November, 2015.
- 14. A five day continuing education and training programme on "Low Power System on Chip Design using XILINX FPGA Devices" organized by the department of ECE, NIT Warangal during 3<sup>rd</sup> -7<sup>th</sup> October, 2015.
- 15. A two day All India workshop on "Emerging Techniques on VLSI Architecture Design for real time environment" conducted by department of ECE, PACE institute of technology &

sciences, Ongole organized by The Institution of Engineers (India), Vijayawada Local Centre during 9<sup>th</sup> -10<sup>th</sup> October, 2015.

- One day workshop on "Research & Development Facilitation" organized by The Institute of Engineers (India), Vijayawada Local Centre, Vijayawada on 29<sup>th</sup> March, 2015.
- 17. A two day All India Seminar on "Agricultural and Horticultural Applications of Unmanned Air Vehicles for Micro-Farming" organized by The Institute of Engineers (India)-Vijayawada Local Centre along with Shri Vishnu Engineering College for women, Bhimavaram and National Design and Research Forum, Bangalore during 26<sup>th</sup> -27<sup>th</sup> March, 2015.
- 18. A three day National workshop on "Theory & Applications of Intelligent Signal Processing" organized by Signal Processing & Communications group, department of ECE, Gudlavalleru Engineering College, Gudlavalleru on 28<sup>th</sup> February-2<sup>nd</sup> March, 2015.
- 19. A five day Short term course on "Advanced DSP Design Techniques" organized by IIT Kharagpur under Continuing Education Programme during July 6<sup>th</sup> -10<sup>th</sup>, 2015.Two week audit course on "Research Methodology", organized by JNTUK, Kakinada during 1<sup>st</sup> -15<sup>th</sup> May 2015.
- Two week audit course on "Intellectual Property Rights and Patents", organized by JNTUK, Kakinada during 16<sup>th</sup> - 30<sup>th</sup> May 2015.
- 21. A one day workshop on "Ultra Low Power Communication using CC430 Microcontroller::Hands on Experience" organized by Signal Processing & Communications group, department of ECE, Gudlavalleru Engineering College, Gudlavalleru on 7<sup>th</sup> February, 2015.
- 22. A one day seminar on "Research in signal and image processing on FPGA & Embedded platforms" organized by The Institute of Engineers (India), Vijayawada Local Centre, Vijayawada on 22<sup>nd</sup> November 2014.
- 23. The value added programme on **"Digital IC Design using CADENCE Tools"** organized by the school of Electronics Engineering, VIT Chennai from 21st -23rd August, 2014.
- 24. One day workshop on "Speech Processing: Current Challenges and Hands-on Experience" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru on 23<sup>rd</sup> August 2014.
- 25. Two week ISTE workshop on "Signals & Systems" conducted by IIT Kharagpur in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 2<sup>nd</sup> -12<sup>th</sup> January 2014.
- 26. A two day workshop on "Issues In Integrated Circuits (ICs) Design" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 13<sup>th</sup> -14<sup>th</sup> December, 2013.
- 27. A two day ISTE workshop on "Aakash for Education" conducted by IIT Bombay under the National Mission on Education through ICT (MHRD) on 10<sup>th</sup>&11<sup>th</sup> November, 2012.
- Faculty Development Program on "VLSI and Embedded System Design" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 7<sup>th</sup> – 8<sup>th</sup> July 2012.

- 29. One week refresher course on "**Pulse & Digital Circuits (Theory & Lab Practice)**" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 21st 26th November 2011.
- 30. A five day Training Programme on "Mentor Graphics (Frontend & Backend) and XILINX Tools" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru in association with IETE Vijayawada Centre & IETE Students' Forum (ISF-GEC) and CoreEL Technologies, Bangalore fron 13<sup>th</sup> 17<sup>th</sup> September 2010.
- 31. A two week AICTE sponsored Staff Development Program on "Current Trends in Biometrics" organized by the department of IT, Gudlavalleru Engineering College, Gudlavalleru during 2<sup>nd</sup> -14<sup>th</sup> November, 2009.
- 32. A two day workshop on "Verilog Programming & Implementation" organized by department of ECE and IEEE Student branch of Gudlavalleru Engineering College, Gudlavalleru during 27<sup>th</sup> -28<sup>th</sup> October, 2007.
- 33. A two day workshop on "VLSI Design" organized by department of ECE and IEEE Student branch of Gudlavalleru Engineering College, Gudlavalleru during 9<sup>th</sup> -10<sup>th</sup> February, 2007.

### **Online FDP/Webinar/Training Programs:**

- 1. **Mrs.T.Venkata Lakshmi** Successfully Completed "**Matlab Masters**", Course organised by DataTeach Labs during 8<sup>th</sup> june to 19<sup>th</sup> June 2020.
- Mrs.T.Venkata Lakshmi attended one week online Faculty Development programme on "Electronics and Communication Engineeringnt Trends and Research Areas in Applied VLSI and Advanced Communicatons", organised by Department of Electronics and Communication Engineering ,Vasireddy Venkatadri Institute of Technology during 8<sup>th</sup> to 12<sup>th</sup> June 2020.
- 3. Mrs.T.Venkata Lakshmi attended one week international online Knowledge development program on "Challenges And Advancements In The Design Of IOT, Vlsi And Embedded Systems: A Researcher View", organised by Department of Electronics and Communication Engineering of Gudlavalleru Engineering College during 8<sup>th</sup> to 13<sup>th</sup> june 2020.
- Mrs.T.Venkata Lakshmi attended one week online Faculty Development Program on "Research Challenges and Opportunities Post Covid-19", and awarded Grade A organised by Research & Development Cell and Institution's Innovation Council of Sri Vasavi Engineering College during 4<sup>th</sup> to 9<sup>th</sup> may 2020.
- Mrs.T.Venkata Lakshmi attended Faculty Awareness Programme on "Outcome Based Education and NBA Accreditation", organised by Sinhgad Institute of Technology and Science on 11<sup>th</sup> may 2020.

- Mrs.T.Venkata Lakshmi successfully completed online Faculty Program on "NBA" with 100% score organized by Bharati Vidyapeeth College of Engineering, on 12<sup>th</sup> may 2020.
- Mrs.T.Venkata Lakshmi attended one week Faculty Development Program on "ICT tools", organized by Department of Information Technology, Sree Vidyanikethan Engineering College in association with STP\_IIT Bombay during 11<sup>th</sup> to 16<sup>th</sup> may 2020.
- Mrs.T.Venkata Lakshmi attended five day National Level Online Faculty Development Program on "Trends in Electronics & Communication Engineering", organized by Department of Electronics and Communication Engineering, Sri Vasavi Engineering College during 22<sup>nd</sup> to 26<sup>th</sup> June 2020.
- 9. Mrs.T.Venkata Lakshmi attended one week National Level Online Faculty Development Program on "Research Challenges and Emerging Trends in Electronics and Communication Engineering", organised by Department of Electronics and Communication Engineering, Ramachandra College of Engineering during 27<sup>th</sup> May to 1<sup>st</sup> June 2020.
- 10. Mrs.T.Venkata Lakshmi attended three day National Level Online Faculty Development Program on " Research Trends in Signal Processing, Antenna, VLSI & IoT", organised by Department of Electronics and Communication Engineering, Sri Vasavi Engineering College during 28<sup>th</sup> to 30<sup>th</sup> May 2020.
- 11. Mrs.T.Venkata Lakshmi attended a webinar on "Impact of Covid in Engineering Education and way forward" organized by Department of Electronics and Communication Engineering, NRI Institute of Technology on 8<sup>th</sup> June 2020.
- 12. Mrs.T.Venkata Lakshmi attended a webinar on "Research Issues and Career Opportunity in VLSI Design" organized by IEEE Student Chapter (STB10084) of K.Ramakrishnan College of Technology, Samayapuram, Trichy on 25<sup>th</sup> June 2020.
- 13. Mrs.T.Venkata Lakshmi attended a webinar on "Global Trends on Biological Teaching and Research" organized by Chennai Institute of Technology on 5<sup>th</sup> June 2020.
- 14. Mrs.T.Venkata Lakshmi attended a webinar on "Radio Frequency Measurements for Cellular and Wireless Communication Systems" organized by Department of ECE, Gudlavalleru Engineering College on 25<sup>th</sup> May 2020.
- 15. Mrs.T.Venkata Lakshmi attended a webinar on "Virtual Classroom Management Using Microsoft Teams", organised by Department of Computer Science and Engineering, Lakireddy Balireddy College of Engineering on 11<sup>th</sup> May 2020.
- 16. Mrs.T.Venkata Lakshmi attended a webinar on "Research Publications, Process, Credentials and outcomes", organised by Baba Institute of technology and Sciences on 9<sup>th</sup> May 2020.
- 17. Mrs.T.Venkata Lakshmi attended webinar on "How to write an Effective Paper", organised by Matterhere on 10<sup>th</sup> May 2020.

- 18. Mrs.T.Venkata Lakshmi attended webinar on "How to write Each Section of Your Paper", organised by Matterhere on 17<sup>th</sup> May 2020.
- 19. Mrs.T.Venkata Lakshmi attended two days webinar on "CMOS circuit design in Cadence Virtuso in 180nm", organised by IEEE student Branch of K.RamaKrishnan College of Technology during 19<sup>th</sup> and 20<sup>th</sup> June 2020.
- 20. Mrs.T.Venkata Lakshmi participated in three day National level webinar series on "VLSI", organised by Department of Electronics and Communication Engineering ,Andhra Loyola Institute of Engineering and Technology in collaboration with Apply Volt during 10<sup>th</sup> to 12<sup>th</sup> June 2020.
- 21. **Mrs.T.Venkata Lakshmi** attended webinar on "**overview on VLSI**", organised by Department of R&D and Electronics and Communication Engineering, Geethanjali Institute of Science & Technology on 4<sup>th</sup> June 2020.
- 22. Mrs.T.Venkata Lakshmi attended workshop on "VLSI circuits Analog and Digital Design perspectives", organised by Department of Electronics and Communication Engineering JNTUA college of Anantapuram in association with AMS Semiconductors and HCL Technologies during 16<sup>th</sup> May to 17<sup>th</sup> May 2020.

## **Guest Lectures Delivered No. : 3**

- 1. Delivered a talk on "Over View on Blooms Taxonomy" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru under Academic Strengthening and Advancement on 15<sup>th</sup> March, 2018.
- 2. Delivered CLT classes on "VLSI Design" for III B.Tech II sem ECE students during the academic year 2016-17.
- Delivered a lecture on "Multivibrators" as part of One week refresher course on "Pulse & Digital Circuits (Theory & Lab Practice)" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 21<sup>st</sup> – 26<sup>th</sup> November 2011.

S. No	Name of the Professional body	Membership Number
1.	The Institute of Engineers (India)	M-150337-5
2.	The Institute of Electronics & Telecommunication Engineers	LM 48530

#### **Professional Body Membership**

- IV B. Tech Students projects In-charge
- Students Seminars In-charge

#### Declaration

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

Date: 27-08-2020

Place: Gudlavalleru

Signature

(T. Venkata Lakshmi)