FACULTY PROFILE

Name of the faculty: K SRILAKSHMI

Department: Electronics and Communication Engineering

College: Gudlavalleru Engineering College

Phone No:

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Address for Communication

H.No:1-156,

Mudinepalli (PO & Mandal),

Krishna District, Andhra Pradesh,

PIN 521325.

Academic Qualifications

S. No	Name of the Degree *(Starting from Ph.D to 10th Class)*	University	Percentage of Marks/Grade	Specialization	Year of Pass
1	Ph.D	JNTUH, Hyderabad	---	ECE	Pursuing
2	M.Tech	JNTUK, Kakinada	84.42%	VLSISD	2011
3	B.Tech	JNTUK, Kakinada	76.58%	ECE	2009
4	Diploma	S.B.T.E.T. Hyderabad	81.9%	DECE	1993
5	SSC	BSE, Hyderabad	66.6%	-	1989

Professional Experience

S. No	Designation	Institution Name	Working Period	
			From	To
1	Assistant Professor	GEC, Gudlavalleru	01.10.2010	Till date

Professional Body Membership: 01

S. No	Name of the Professional body	Membership Number
1	**IE(I)**	**AM162848-0**

Papers Published in Journals No. : 14

1. Patent Application Publication, "Magnetic Resonance Coupling Wireless Power Transfer Unit For Implantable Biomedical Devices", The Patent Office Journal No. 34/2020 Dated :21/08/2020, pp. 33088.
2. K Srilakshmi, A V N Tilak, K Srinivasa Rao and Y Syamala, "Energy Efficient 64-bit Asynchrobatic Adder", Book chapter, Lecture notes in electrical engineering book series(LNEE), Vol. 476, 2018, pp. 499-508.
3. K Srilakshmi, A V N Tilak and K Srinivasa Rao, "Ultralow-Power and Secure S-Box Circuit Using FinFET Based ECRL Adiabatic Logic", Journal of Science and Technology, Vol. 10 No. 3 (2018) p. 10-17.
4. Nekkanti Gothami and K Srilakshmi, "Design and Implementation of Reversible Multiplier using optimum TG Full Adder", IOSR Journal of Electronics and Communication Engineering (IOSR-JECE), Vol. 12(3), June 2017, pp. 81-89.
5. T Durga prasad, K Srilakshmi and Y Syamala, "Design and implementation of energy efficient code converters", International Journal of computer science and information technology & Security, Vol. 6(4), pp. 33-36, 2016.
6. M Uma Maheswari and K. Srilakshmi "Power Gating Based Ground Bounce Noise Reduction", International Journal of Engineering Research and Applications (IJERA), Vol. 4(8), 2014, pp: 54-60.
7. K Srilakshmi, Y Syamala and A Suvir vikram, "Design and Implementation of CMOS VLSI Circuits using Dual Subthreshold Supply Voltages", International Journal of Engineering Research and Applications (IJERA), Vol. 3(5), 2013, pp: 1604-1608.
8. N Somasehara varma, Y Syamala and K Srilakshmi, "Design of low power logic circuits using gate diffusion input(GDI) technique", International journal of VLSI design and communication systems (VLSICS), Vol. 4(5), 2013, pp: 89-95.
9. A Suvir Vikram, K Srilakshmi and Y Syamala, "Static Power Optimization Using Dual Sub Threshold Supply Voltages In Digital CMOS VLSI Circuits", International journal of VLSI

design and communication systems (VLSICS), Vol. 4(5), 2013, pp: 77-88.

10. Y Syamala, K Srilakshmi and N Somasekhar Varma, "Design and Implementation of CMOS VLSI Digital Circuits Using Self-Adjustable Voltage Level Technique" International Journal of Engineering Research and Applications (IJERA), Vol. 3(5), 2013, pp: 1941-1946.
11. Y Syamala, A V N Tilak and K Srilakshmi, "Testing of Reversible Combinational Circuits", Springer, 2012, pp: 46-53.
12. G Bindu and K Srilakshmi, "A Novel Approach of LSB Steganography for Retreiving Text from Audio", International Journal Computer Technology & Applications (IJCTA), Vol. 3(4), 2012, pp: 1384-1387.
13. M V Narayana, G Ashok, Y Syamala and K Srilakshmi, "Low Power CMOS Digital Design Using Adiabatic Logic", Proceedings of ICVSP.
14. K Srilakshmi, K Anitha, Dr. P Rajesh Kumar and G R L V N Srinivas Raju, "Design and implementation of distance measuring digital hardware", IJECT, Vol. 2(1), 2011, pp: 222-225.

Papers presented in Conferences No. : 12

1. K. Srilakshmi, A V N Tilak, K. Srinivasa Rao and Y. Syamala, "Secured MPFAL Logic for IoT Applications", Proc. of 2nd International conference on Device, Circuit and System (2020 IEEE VLSI DCS), July 18-19, 2020.
2. K Srilakshmi, A V N Tilak and K. Srinivasa Rao, " Energy Efficient Adder for Bio-Medical Applications" Proc. of IEEE Region 10 international conference on Humanitarian Technology (R10HTC), December 2018, pp. 1-5.
3. K. Srilakshmi, A. V. N Tilak and Y. Syamala, " Development of Low-Power VLSI Circuits for Biomedical Applications" Proceedings of First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018), November 30 & December 1, pp. 23-27, 2018.
4. E. Vijaya Babu, Y. Syamala, K. Srilakshmi and K. Siva Anjaneyulu, "Design and analysis of multiplexer based flash ADC", Proc. of CITAES 2018.
5. K. Srilakshmi, A. V. N. Tilak and K. Srinivasa Rao, "Ultralow-Power Multiplier for DSP Applications", Proc. of Seventh International Conference on Advances in Computer Science and Application – CSA 2018 and to be published in IJEECSE.
6. Y. Syamala, A. V. N. Tilak, K. Srilakshmi and T. Anil Chowdary, "Low Power Testable Reversable Combinational Circuits", IEEE international conference on Intelligent Computing and Control Systems (ICICCS), June 14-15, 2018, Madurai.
7. K. Srilakshmi, A. V. N. Tilak and K. Srinivasa Rao, "Performance of FinFET Based Adiabatic

Logic Circuits" , Proc. of IEEE International Conference (TENCON-16), pp. 2377-2382, 2016.

8. K. Srilakshmi, A. V. N Tilak, K. Srinivasa Rao and Y. Syamala, "Energy Efficient 64-Bit Asynchrobatic Adder" , Proc. of International Conference on Nano-electronics, Circuits and Communication Systems (NCCS-2016).
9. B N V Amar Surendra Babu, Y Syamala and K Srilakshmi, "Design and Implementation of Power Optimized 64 Bit Floating Point ALU Employing Block Enabling Technique", 4th International Conference on Innovations in Electronics & Communication Engineering, Hyderabad during 21-22 August 2015.
10. Y Syamala, AVN Tilak, K Srilakshmi, "Testing of Reversible Combinational Circuits", Third International Conference on Advances in Communication, network an computing (CNC-2012), Channai, During 24^{th} -25^{th} Feb 2012.
11. Y.Syamala and K.Srilakshmi B.Kavyasree, "Transistor Realization of Reversible parallel Adder/subtractor", National Conference on VLSI, Signal Processing and Communications, Vadlamudi, During 5^{th} -6^{th} Feb 2012.
12. G.R.L.V.N. Srinivas Raju K. Srilakshmi, K. Anitha, Dr P. Rajesh Kumar, "Design and implementation of distance measuring digital hardware", International Conference on Advances in Computer Science, Communication and Bio-Instrumentation Engineering (ICACCBIE-2011), Eluru, During 8^{th} -9^{th} Dec 2011.

Workshops Organized No. : Nil

Workshops /Conferences /Seminars Attended No. : 14

1. Three day workshop on "Discovery of people reaction and needs after disaster using data analysis techniques" organized by IEEE Region 10 international conference on Humanitarian Technology (R10HTC) during 6^{th}-8^{th} December 2018in Colombo, Sri Lanka.
2. Three day workshop on "Co-designing primary health care platforms for resource constrained environments" organized by IEEE Region 10 international conference on Humanitarian Technology (R10HTC) during 6^{th}-8^{th} December 2018in Colombo, Sri Lanka.
3. One week workshop on "CMOS, Mixed signal and radio frequency VLSI Design" organized by IIT Kharagpur from 30^{th} January-4^{th} February 2017.
4. Two day "workshop on Analog VLSI Design" covering OPAMP design, PLL Design, data converters, RFCMOS and analog Fault Diagnosis organized by C-DAC Bangalore during 22-23^{rd} January 2016.
5. One day workshop on "Ultra Low Power Communication using CC430 Microcontroller:: Hands on Experience" Conducted by Signal processing and Communication Research Group,

Department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 7th Feb 2015.

6. Two week ISTE workshop on "Signals & Systems" conducted by IIT Kharagpur in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 2nd -12th January 2014.
7. One week short term course on "Advances in VLSI Signal Processing" conducted by IIT Kharagpur during 03rd -07th Dec 2013.
8. Two week ISTE workshop on "Analog Electronics" Conducted by IIT Kharagpur in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 4th -14th June 2013.
9. One week workshop on "Training Teachers for Excellence" conducted by Gudlavalleru Engineering College, Gudlavalleru during 29th April - 4th May 2013.
10. Two day national workshop "Advanced VLSI Methodology (NW-AVLSIT-2013)" conducted by department of ECE, University College of engineering, JNTUK, Kakinada during 26th -27th April 2013.
11. Two day ISTE workshop on Akash for Education conducted by IIT Bombay in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 10th -11th November 2012.
12. Participated in the International Student Conference On VLSI Design, Hyderabad International Convention Centre (HICC), Hyderabad during 9th -10th Jan 2012.
13. One day workshop on "TI-Digital Signal Processors and their Applications" conducted by Shri Vishnu Engineering College for Women during 10th Feb 2011.
14. Two day workshop on "Digital Design Simplified - Taking Design from Simulation to Layout Extraction" conducted by Shri Vishnu Engineering College for Women during 30th April-1st May 2010.

Online Workshops /Conferences /Seminars Attended No. : 04

1. Participated in 2nd International conference on Device, Circuit and System (2020 IEEE VLSI DCS), Organised by MSIT, Kolkata, July 18-19, 2020.
2. Workshop on "Reference Management tools and Online Citation Database" with grade A , organised by Indian Academic Researches Association, during 21st to 23rd May 2020.
3. Attended workshop on "**VLSI circuits Analog and Digital Design perspectives**", organised by Department of Electronics and Communication Engineering JNTUA college of Anantapuramu in association with AMS Semiconductors and HCL Technologies during 16th - 17th May 2020.

4. Attended a two day online workshop on " **Modern Methods for Teaching-Learning Practices**", organised by Krishna University on 12th-13th May 2020.

Webinars attended No.: 11

1. Webinar on Low Power VLSI Circuits and Energy Harvesting for IoT Applications, organised by department of electronics and Computer engineering, Sreenedhi institute of science and technology, Hyderabad during 15th August 2020.
2. A National Level Webinar on Intellectual Property Rights & Patents - A View organized by IQAC, Gudlavalleru Engineering College, Gudlavalleru held during 10 - 12 August 2020.
3. Attended a webinar on "**Impact of COVID in Engineering Education and Way Forward**", organised by ISTE chapter, Gudlavalleru Engineering College on 9th June 2020.
4. Attended A Webinar on "**Relevance of IEEE Standards in Teaching, Learning and Industry Collaborations**", organised by IEEE.
5. Webinar on "**Outcome Based Education Road-Map to E-Learning & Accreditation**", organised by Informatics Publishing Ltd., on 29th May 2020.
6. Attended A webinar on "**Internet of Things**", organised by Department of Electronics and Communication Engineering , SNS College of Technology on 25th May 2020.
7. Attended A Webinar on "**Custom IP Design and Validation Using Vivado**", organised by CoreEL Technologies and Xilinx on 22nd May 2020.
8. A Webinar on "**Block Level Design Using IP Integrator in Xilinx Vivado**", organised by CoreEL Technologies and Xilinx on 22nd May 2020.
9. **A** Webinar on " **Research Outcomes: Technical Paper Writing, Research Proposal, Patent Filing,**" organised by Datateach on 22nd April 2020.
10. Attended A webinar on "**Virtual Classroom Management Using Microsoft Teams**", organised by Department of Computer Science and Engineering, Lakireddy Bali Reddy College of Engineering on 11th May 2020.
11. A Webinar on " **Analog IC Design Using Mentor EDA Tools**", organised by CoreEL Technologies and Xilinx on 10th April 2020.

Certifications/Training Programs Attended No. : 13

1. One week faculty development program on "Communications and signal processing" organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 29th October to 3rd November 2018.
2. Two day training program on "Mentor Graphics Tools" organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 31st August and 1st September 2017.

3. One week faculty development program on “Hands on Experience in signal processing Applications” organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru During 7-12 November 2016.
4. 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.
5. One week refresher course on “Microprocessors & Microcontrollers” organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during held during 17-21 November 2015.
6. Two day training program on “Analog and Digital CMOS IC Design flow using Mentor graphics EDA Tools” Department of ECE, Shri Vishnu Engineering College for Women, Bhimavaram from 5^{th} -6^{th} October, 2015.
7. One day seminar on “Research in Signal and Image Processing on FPGAs and Embedded platforms” The Institution of Engineers(India), Vijayawada Local Center, Vijayawada on 22^{nd} Nov 14.
8. One day workshop on “Speech Processing: Current Challenges and Hands-on Experience” organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru on 23^{rd} August 2014.
9. Attended 3^{rd} Research methodology course conducted by JNTUH, Hyderabad during 16^{th} -21^{st} December 2013.
10. One week refresher course on “Electronic Devices and circuits” organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 23 – 28^{th} September 2013.
11. Attended the complimentary training on “MATLAB, Simulink & Related Tool Boxes for Engineering Education” Organised by GEC, Gudlavalleru during 3^{rd} -4^{th} April 2013.
12. Faculty Development Program on “VLSI and Embedded System Design” organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 7^{th} – 8^{th} July 2012.
13. One week refresher course on “Pulse & Digital Circuits (Theory & Lab Practice)” organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 21^{st} – 26^{th} November 2011.

Online Certifications/Training Programs Attended No. : 16

1. AICTE sponsored online Short Term Training program on Block chain Architecture and use cases (Decentralised network synchronization) Phase II organised by department of electronics and communication engineering, Gudlavalleru engineering college during 17th - 22nd August 2020.
2. AICTE sponsored online Short Term Training program on Block chain Architecture and use cases Phase I organised by department of electronics and communication engineering, Gudlavalleru engineering college during 10th -15th August 2020.
3. One week refresher course on Embedded system design organised by department of electronics and communication engineering, Gudlavalleru engineering college during 27th July-1st August 2020.
4. Completed APSSDC online FDP on Internet of Things during 13th-25th July 2020.
5. National level online FDP on Cyber Security, organised by department of CSE and IT in association with Cyberpsy of gudlavalleru engineering college during 22nd-26th July 2020.
6. Attended Five day online Faculty Development Programme on "**Opportunities and Challenges in Next-Generation Semiconductor Devices**", organised by Department of Electronics and Communication Engineering, Anil Neerukonda Institute of Technology and Sciences, during 16th - 20th June 2020.
7. Participated in Virtual Book Launch and expert talks on "**Future of Higher Education – Nine Mega Trends"**, organised by ICT Academy on 30th June 2020.
8. Attended Online Faculty Development Programme on "**MATLAB and Simulink in Engineering Education**", organised by APSSDC during 10th-11th June 2020.
9. 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 8th- 13th June 2020.
10. 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 8th - 10th June 2020.
11. One week online faculty Development Program on "**Artificial Intelligence and its Applications**", organised by Department of Computer Science and Engineering in collaboration with 360DigiTMG , Ramachandra College of Engineering During 25th - 30th May 2020.

12. Attended Five day online Faculty Development Program on "**Trends in Communication**", organised by the Department of Electronics and Communication Engineering in association with Averzs Technologies, Sir. C R Reddy College of Engineering during 26th - 30th May 2020.
13. Participated and successfully completed three days online course on "**Writing Case Studies, Project Preparation and Funding of Research Projects**", with grade **A** , organised by Indian Academic Researches Association, during 21st- 23rd May 2020.
14. Participated in season 5 sessions organised by ICT Academy skycampus on the theme "**The Future of Skills –Education, Employment and Enterpreneurship"**, conducted on 11th - 15th May 2020.
15. Successfully completed Online Certification Skill Development Program on "**Design Implementation and Verification in VLSI**", organised by Sandeepani School of Embedded System Design, during 27th April - 1st May 2020.
16. Successfully Completed online Faculty Program on "**NBA**", with a score of **65%**, organized by Bharati Vidyapeeth College of Engineering on 12th May 2020.

Guest Lectures Delivered No. : 03

1. Delivered a lecture on the topic "Architecture and Instruction Set of 8086 Microprocessor" as a part of one week refresher course on "Microprocessors & Microcontrollers" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 17-21 November 2015.
2. Delivered a lecture on the topic "VHDL Design flow" as a part of one week refresher course on "Digital system design and digital IC applications" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 17th – 21st June 2014.
3. Delivered a lecture on the topic "Low power design techniques" for faculty of ECE at Gudlavalleru Engineering College, Gudlavalleru on 9th March 2012.

Projects Guided: 10

Under Graduation

S. No.	Name of the project	Year
1	Design and analysis of multiplier using adiabatic logic	2019-20
2	Design of Low Power Full Adder using Adiabatic Logic	2018-20
3	Design and implementation of adiabatic flip-flops	2018-19

4	VHDL Modeling of smart sensor	2018-19
5	Design and analysis of low power hybrid adder	2017-18
6	Automatic Aquaculture Management System Using GSM	2016-17
7	Comparison of multipliers using Vedic mathematics	2015-16
8	Design and Implementation of 8-bit Comparator using Low Power Design Techniques	2014-15
9	Interface Card of Integrated Coastal Surveillance System	2013-14
10	Design and Implementation of Cache Memory	2012-13
11	Low Power ALU using Reversible Logic gates	2011-12
12	Front end and Back end Implementation of Sequence Detector	2010-11

Post Graduation: 06

S. No.	Name of the project	Year
1	Design and analysis of 15:4 compressor	2017-18
2	Design of reversible multiplier using reversible TG Full Adder	2016-17
3	Design and Implementation of Energy Efficient Code Converters using PFAL and ECRL	2015-16
4	Power Gating Based Ground Bounce Noise Reduction	2013-14
5	Static Power Optimization Using Dual Sub-Threshold Supply Voltages in Digital CMOS VLSI Circuits	2012-13
6	A Novel Approach for LSB Steganography for Retrieving Text from Audio	2011-12

Guiding Ph. D Students: Nil

R&D and Consultancy

S. No	Project Title	Source of Funding	Duration	Role	Status
1	A Novel Approach for Development of Low Power VLSI Circuits for Energy Efficient Pacemakers.	UGC	2 Years	Principal investigator	Completed

Curriculum Design and Development

1. VLSI Design
2. Low power VLSI Design
3. Digital Design and Simulation Laboratory

Academic Rewards / Achievements:

- Owned best paper award for the paper entitled "Energy efficient adder for biomedical applications" presented in IEEE Region 10 HTC held in Sri Lanka during 6^{th}-8^{th} December 2018.
- Completed 12 weeks NPTEL course on "MICROPROCESSORS AND MICROCONTROLLERS" and secured 88% of marks with top 2% (ELITE).
- Completed 8 weeks NPTEL course on "HARDWARE MODELLING USING VERILOG" and secured 90% of marks with top 5% (ELITE with GOLD).
- Completed 8 weeks NPTEL course on "DIGITAL CMOS VLSI DESIGN" and secured 73% of marks.
- Completed 12 weeks NPTEL course on "DIGITAL CIRCUITS" and secured 90% of marks with top 1% (ELITE with GOLD).
- Completed 12 weeks NPTEL course on "DIGITAL INTIGRATED CIRCUITS".
- Received an amount of Rs. 45, 000/- as gratuity for the retention of 5 years.

Extra Curricular Activities: Nil

Declaration

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

Date: 21.08.2020 Signature

Place: Gudlavalleru (K. Srilakshmi)