



**ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)**


**Accredited by NAAC & An ISO 9001:2015 Certified Institution**

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FACULTY PROFILE

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<b>Name of the Faculty</b>	<b>Dr. Lakshmi Narayana Thalluri</b>		
Designation	<b>Associate Professor</b>		
Department	<b>ELCTRONICS &amp; COMMUNICATION ENGINEERING</b>		
Date of Joining the Institution	<b>06-06-2012</b>		
Qualification with Class/Grade	<b>UG: B.Tech. (ECE) FIRST CLASS</b>		
	<b>PG: M.Tech. (VLSI) FIRST CLASS WITH DISTINCTION</b>		
	<b>Ph.D. (RF MEMS Switches)</b>		
Employee ID	<b>ALIET-12-06</b>		
E-Mail	<b>drtltn9@gmail.com</b>		
Total Experience in Years	<b>Teaching: 8+ years</b>	<b>Industry: 0 year</b>	
Papers Published	<b>National: 00</b>	<b>International: 17</b>	
Papers presented in Conferences	<b>National: 00</b>	<b>International: 10</b>	
PhD Guide? Give field & University	<b>Field: ---</b>	<b>University: ----</b>	
PhDs / Projects Guided	<b>PhDs: 00</b>	<b>Projects at Masters Level: 05</b>	
		<b>Projects at UG Level: 20 Batches</b>	
Books Published/IPRs/Patents	<b>---</b>		
Professional Memberships	<b>IEEE(92493162) , IE(AM 165840-1), IACSIT(80343463), IAENG(124495).</b>		
Consultancy Activities	<b>---</b>		
Awards	<b>--</b>		
Grants fetched	<b>---</b>		
Whether Ratified by University (Yes/No)	<b>YES</b>		

## **RESEARCH PUBLICATIONS:**

### **List of Publications (Conferences) :**

S.No.	Authors	Title of Research Paper	Name of proceedings	ISBN No.	Date of Conference	Organized by	Publish ed in
1	<sup>1</sup> Lakshmi Narayana Thalluri, <sup>2</sup> Anji Reddy Nallapu, <sup>3</sup> Ramakrishna Konda, <sup>4</sup> S. Sai deep, <sup>5</sup> Kata Naga Harsha	Design and Performance Analysis of Vivaldi Antenna for Medical Applications	International Conference on Communication and Signal Processing	978-1-7281-4988-2	28-7-2020 to 30-7-2020	Om sakthi Adhiparasakthi Engineering College, Melmaruvathur-603319	IEEE Digital Library
2	<b>Lakshmi Narayana Thalluri</b> <sup>1</sup> , K Srinivasa Rao <sup>2</sup> , G Venkata Hari Prasad <sup>3</sup> , S S Kiran <sup>4</sup> , Koushik Guha <sup>5</sup> , Appala Raju Kanakala <sup>1</sup> , P Bose Babu <sup>1</sup>	Reconfigurable Antennas for RFID/WLAN/WiMAX Applications using RF MEMS Switches	International Conference on 'Microelectronics, Circuits and Systems', Micro-2020	--	25-7-2020 to 26-7-2020	Applied Computer Technology, Kolkata, India. and Delhi Technological University, Delhi, India.	Lecture Notes on Electrical Engineering(LN EE) Springer - Nature.
3	Md. Baig Mohammad <sup>1</sup> , <b>Lakshmi Narayana Thalluri</b> <sup>2</sup> , Renuka Devireddy <sup>3</sup> , Priyanka.Ch <sup>4</sup> Rajiya Sulthana <sup>5</sup>	An image processing approach for grading of mangoes based on maturity	International conference on computational performance Evaluation	---	2-7-2020 to 4-7-2020	North-Eastern Hill University, Chillong.	IEEE digital Library
4	<b>Lakshmi Narayana Thalluri</b> , Jitendra Prasad Ayodhya, T B Anjaneya Prasad, CH Yuva Raju, SaiDivya Vadlamudi , P Bose Babu	A Novel and Smart IoT System for Real Time Agriculture Applications with IaaS Cloud Computing	International Conference on Computer Communication and Informatics (ICCCI-2020)	978-1-7281-4514-3	22-24 Jan. 2020	Sri Shakthi institute of Engineering and technology , Coimbatore.	IEEE Digital Library
5	Kandula Rama Rao ; Sathuluri Mallikharjuna Rao ; Lakshmi Narayana Thalluri ; Bayyana Harika Naidu	FM0 and manchester encoding using SOLS technique with clock gating & power gating methods	International Conference on Communication and Signal Processing (ICCSP-2017)	978-1-5090-3800-8	6-8 April 2017	Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu ,603319.	IEEE Digital Library
6	<b>Lakshmi NarayanaThalluri</b> , LakkojuGayatry, S R Sastry Kalavakolanu <sup>3</sup> , AppalaRajuKanakala <sup>1</sup>	Structural Analysis and Design of Microstrip Antenna forS-Band Applications	International Conference on Control, Instrumentation, Communication and Computational Technologies, (ICCICCT-2016).	978-1-5090-5240-0	16 <sup>th</sup> & 17 <sup>th</sup> , December, 2016.	Noorul Islam University, Kumaracoil, Kanyakumari Dist., Tamilnadu, India - 629 180	IEEE Digital Library
7	K SrinivasaRao, M DurgaPrakash,	Cantilever and Cirular Disc	International Conference	978-	9 <sup>th</sup> &10 <sup>th</sup> December,	GSSS Institute of	IEEE Digital

	<b>Lakshmi NarayanaThalluri,</b>	Structure Based Capacitive Shunt RF MEMS Switches	Electrical, Electronics, Communication, Computers and Optimization Techniques (ICECCOT-2016)	1-5090-4697-3	2016	Engineering & Technology for KRS Road, Metagalli, Mysuru-570 016, Karnataka.	Library
8	<b>Lakshmi NarayanaThalluri,</b> S R SastryKalavakolanu, P Bosebabu, G Roopa Krishna Chandra,	Design of Human Face Detection and Recognition System Along With Speech Synthesis	International Conference on Control, Instrumentation, Communication and Computational Technologies, (ICCICCT-2015).	978-1-4673-9825-1	18 <sup>th</sup> &19 <sup>th</sup> , December, 2015.	Noorul Islam University, Kumaracoil, Kanyakumari Dist., Tamilnadu, India - 629 180	IEEE Digital Library
9	<b>Lakshmi NarayanaThalluri,</b> SusruthaBabuSukhavasi, SuparshyaBabuSukhavasi, S R SastryKalavakolanu	Design of Low Power 1x3Router	International Conference on Communication and Electronics Information (ICCEI).	----	14 <sup>th</sup> &15 <sup>th</sup> , January, 2012.	International Association of Computer Science and Information Technology (IACSIT)	ASME Digital Library
10	<b>Lakshmi NarayanaThalluri,</b> SusruthaBabuSukhavasi, SuparshyaBabuSukhavasi, S R SastryKalavakolanu, Tatineni Krishna Karthik	Design of Low Power and High Performance Router Using Dynamic Power Reduction Technique	International Conference on Control, Instrumentation, Communication and Computational Technologies, (ICCICCT-2015)	978-1-4577-1546-4	15 <sup>th</sup> &16 <sup>th</sup> , March, 2012.	Karunya University, Coimbatore, Tamilnadu.	IEEE Digital Library

### List of Publications (Journals):

S.No.	Authors	Title of Research Paper	Name of Journal, Publisher.	DOI	Year of Publication	Impact Factor
1	<b>Lakshmi Narayana Thalluri,</b> Koushik Guha, K. Srinivasa Rao, G. Venkata Hari Prasad, K. Girija Sravani, K. S. R. Sastry, Appala Raju Kanakala, P. Bose Babu.	Perforated serpentine membrane with AlN as dielectric material shunt capacitive RF MEMS switch fabrication and characterization	Microsystem Technologies, Springer Berlin Heidelberg Publisher. <b>(SCI)</b>	<a href="https://doi.org/10.1007/s00542-020-04755-3">https://doi.org/10.1007/s00542-020-04755-3</a>	<b>31-January-2020</b>	<b>1.58</b>
2	K. Srinivasa Rao, Ch. Gopi Chand, K. Girija Sravani, D. Prathyusha, P. Naveena, G. Sai Lakshmi, P. Ashok Kumar, <b>T. Lakshmi Narayana.</b>	Design, Modeling and Analysis of Perforated RF MEMS Capacitive Shunt Switch	IEEE Access, IEEE Publisher. <b>(SCI)</b>	10.1109/ACCESS.2019.2914260	1-May-2019	3.5
3	K. Girija Sravani, D. Prathyusha, K. Srinivasa Rao, P. Ashok Kumar, G.	Design and Performance Analysis of Low Pull-In	IEEE Access, IEEE Publisher.	10.1109/ACCESS.2019	11-April-2019	3.5

	Sai Lakshmi1, Ch. Gopi Chand, P. aveena, <b>Lakshmi Narayana Thalluri</b> , and Koushik Guha	Voltage of Dimple Type Capacitive RF MEMS Shunt Switch for Ka-Band	(SCI)	19.290 5726		
4	K. SrinivasaRao, <b>Lakshmi Narayana Thalluri</b> , KoushikGuha, and K. GirijaSravani.	Fabrication and Characterization of Capacitive RF MEMS Perforated Switch	IEEE Access, IEEE Publisher. (SCI)	10.110 9/ACC ESS.20 18.288 3353	12- December- 2018	3.5
5	K. GirijaSravani, <b>T. Lakshmi Narayana</b> , KoushikGuha, K. SrinivasaRao.	Role of dielectric layer and beam membrane in improving the performance of capacitive RF MEMS switches for Ka-band applications	Microsystem Technologies , Springer Berlin Heidelberg Publisher. (SCI)	https:// doi.org /10.100 7/s005 42- 018- 4038-4	21-August- 2018	1.58
6	<b>T. Lakshmi Narayana</b> , K. GirijaSravani and K. SrinivasaRao.	A Micro Level Electrostatically Actuated Cantilever and Metal Contact Based Series RF MEMS Switch for Multi-Band Applications	Cogent Engineering, Taylor and Francis Publisher. (H-index, ESCI, Scopus)	https:// doi.org/ 10.108 0/2331 1916.2 017.13 23367	28-June- 2017	0.9
7	<b>T. Lakshmi Narayana</b> , K. GirijaSravani and K. SrinivasaRao.	Design and analysis of CPW based shunt capacitive RF MEMS switch	Cogent Engineering, Taylor and Francis Publisher. (H-index, ESCI, Scopus)	https:// doi.org/ 10.108 0/2331 1916.2 017.13 63356	28-August- 2017	0.9
8	<b>Lakshmi NarayanaThalluri</b> , K SrinivasaRao, S R SastryKalavakolanu, AppalaRajuKanakala.	Analysis of Radio Frequency and Mechanical Properties of Bridge Based Shunt Capacitive RF MEMS Switch	IJPAM, semanticscholar. (Scopus)	-	2017	-
9	K.Prathyusha, <b>Lakshmi NaryanaThalluri</b> .	Design of a Novel IoT Based Cardiovascular Patient health andSurrounding Weather Monitoringand Controlling System	IJRECE	-	2018	-
10	SkNazma, <b>Lakshmi NaryanaThalluri</b> .	Role of SURF and MFCC Algorithms in the design of Human interacting systems.	IJRECE	-	2018	-
11	<b>T. Lakshmi Narayana</b> , D. Manaswi, A. Vanaja, and K. SrinivasaRao.	A Novel Series SPST RF MEMS Switches with High Isolation and Low Actuation Voltage	Journal of Mechanics and MEMS (Peer Reviewed)	-	2017	-

12	<b>Lakshmi NarayanaThalluri,</b> K. SrinivasaRao.	Review on Analytical Design, Simulation, Fabrication, Characterization, and Packaging Aspects of Micro Electro Mechanical Switches for Radio Frequency Applications	Journal of Bio- Sensors, Biomarkers, and Diagnostics.	-	2016	-
13	<b>Lakshmi NarayanaThalluri,</b> Dr. M Siva Ganga Prasad, SurendraBabuKumpati, Syed Abdul Rahim, K. GnanaDeepika	Spartan-6 LX45 FPGA Based Digital Signal Processing System	International Journal of Electronics & Communication Technology (IJECT)	-	2014	-
14	K. SwethaSree , <b>T. Lakshmi Narayana</b>	Implementation of High Throughput Radix-16 FFT Algorithm	International Journal of Science and Research (IJSR)	-	2014	-
15	S. RahilHussian, V. NarasimhaNayak, Dr. FazalNoorbasha, S.DayasagarChowdary, <b>Lakshmi NarayanaThalluri.</b>	VLSI Implementati -on of Densely Packed Decimal Converter to and from Binary Coded Decimal using Reversible Logic Gates	<b>Internationa l Journal of Engineering Research and Applications (IJERA)</b>	-	2012	-
16	SuparshyaBabuSukhavasi, SusruthaBabuSukhavasi, Dr.Habibulla khan, S RSastryKalavakolanu, Vija yaBhaskarMadivada, <b>Lakshmi NarayanaThalluri</b>	Design of a Low Power Operational Amplifier by Compensating the Input Stage	<b>Internationa l Journal of Engineering Research and Applications (IJERA)</b>	-	2012	-
17	SusruthaBabuSukhavasi , <b>Lakshmi NarayanaThalluri,</b> SuparshyaBabuSukhavasi, S R SastryKalavakolanu	Low Power Synthesis in Digital Design by Automatic Insertion of Clock Gating and Operand Isolation Cells	<b>Internationa l Journal of Engineering Research and Applications (IJERA)</b>	-	2012	-

### **Books Published:**

- "RF MEMS Switches: Design, Simulation, Fabrication and Characterization", Paper back : 138 pages, ISBN-10 : 9389530369, ISBN-13 : 978-9389530360, Publisher : White Falcon Publishing (21 November 2019).

## WORKSHOPS, FACULTY DEVELOPMENT PROGRAMS & SEMINARS:

- Successfully completing the course on **online teaching skills**, between 15<sup>th</sup> - 20<sup>th</sup> June 2020, organized by Loyola Institute of Business Administration (LIBA), Chennai.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Research Trends in VLSI Design** from 25-05-20 to 29-05-20 (One Week) Organized by Electronics and Communication Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Nanomaterials and Devices** from 25-05-20 to 29-05-20 (One Week) Organized by Applied Science Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Open Source Cyber Security Tools** from 18-05-20 to 22-05-20 (One Week) Organized by Computer Science and Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Quantum and Energy Materials: Potential & Applications** from 18-05-20 to 22-05-20 (Except 19/05/2020, 20/05/2020, 21/05/2020, 22/05/2020) Organized by Applied Science Department NITTTR, Chandigarh
- Participated in the Online AICTE Recognized Faculty Development Programme on **NBA Accreditation of Engineering Programs** from 11-05-20 to 15-05-20 (One Week) Organized by Mechanical Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Image and Embedded Processing** from 11-05-20 to 15-05-20 (One Week) Organized by Electronics and Communication Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Strategic Planning for Entrepreneurship Promotion** from 04-05-20 to 08-05-20 (One Week) Organized by Entrepreneurship Development and Industrial Coordination Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Understanding Project Management Basics** from 27-04-20 to 01-05-20 (One Week) Organized by Entrepreneurship Development and Industrial Coordination Department NITTTR, Chandigarh
- Completed the Short Term Training Programme through ICT Mode on **Network Security** organized by NITTTR, Kolkata from 27/04/2020 to 01/05/2020 [ duration: 1 Week]
- Participated in the Online AICTE Recognized Faculty Development Programme on **Low Power VLSI Design** from 20-04-20 to 24-04-20 (One Week) Organized by Electronics and Communication Engineering Department NITTTR, Chandigarh.
- Participated in the Online AICTE Recognized Faculty Development Programme on **Latest Wireless and Computing Technologies** from 14-04-20 to 18-04-20 (One Week) Organized by Electronics and Communication Engineering Department NITTTR, Chandigarh.
- Participated in the "**Applied Robotics Control Lab**" faculty development program 2.0 from 5th to 12th August 2019, conducted by German center for advanced Engineering and Management studies UG and APS GmbH-European center for Mechatronics.
- Participated in the "**Applied Robotics Control Lab**" faculty development program from 16th to 24th May 2019, conducted by German center for advanced Engineering and Management studies UG and APS GmbH-European center for Mechatronics.
- Participated in 13th Hands-on training on **MEMS cantilever and Micro and Nano characterization techniques**, conducted at the center for nano science and Engineering, IISc Bangalore, from 12th to 22nd September 2017.
- Participated in a three day faculty development program on "**Industrial IoT using NI graphical systems design platform**" organized by department of EEE & ECE, ALIET, during 13<sup>th</sup> to 15<sup>th</sup> July 2017.

## Programs Organized:

- Organized and acted as a Speaker in a Two day Workshop on "A Role of Transducers & Programmable devices in control & Medical Applications using IoT" from 30<sup>th</sup> & 31<sup>st</sup> January 2017.
- "**Role of Transducers and Programmable Devices in IOT Applications**" at Andhra Loyola

Institute of Engineering and technology, Vijayawada, During 12<sup>th</sup> -14<sup>th</sup> December 2017.

- Organized and acted as a Speaker in a two day workshop On “Role of Transducers & Programmable Devices in IOT Applications” 4<sup>th</sup>& 5<sup>th</sup> December 2018, for B.Sc. Electronics DEC students, Andhra Loyola College at ALIET Vijayawada.

**Research Contribution:**

- Fabricated and Characterized a “Shunt Capacitive RF MEMS Switch” during 5<sup>th</sup> to 23<sup>rd</sup> February 2018, at CeNSE, IISc, Bangalore.