



# ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY

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


**Accredited by NAAC & An ISO 9001:2008 Certified Institution**

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## FACULTY PROFILE

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Name of the Faculty	Dr.S.MALLIKHARJUNA RAO		
Designation	Associate Professor		
Department	ELCTRONICS AND COMMUNICATION ENGINEERING		
Date of Joining the Institution	13-06-2011		
Qualification with Class/Grade	PhD: Vel Tech University		
	PG: M.Tech with 1 <sup>st</sup> Class with Distinction from AU		
	UG: B.Tech with First Class from JNTUH		
Employee ID	ALIET-11-02		
E-Mail	<a href="mailto:smr.aliet@gmail.com">smr.aliet@gmail.com</a> , <a href="mailto:smr.aliet@aliet.ac.in">smr.aliet@aliet.ac.in</a>		
Blogger/ website/ webpage	<a href="http://smallikharjun.blogspot.com">smallikharjun.blogspot.com</a>		
Total Experience in Years	Teaching: 11+ years	Industry: 0 years	
Papers Published	National: 00	International: 17	
Papers presented in Conferences	National: 00	International: 03	
Projects Guided	Projects at Masters Level: 05		
	Projects at UG Level: 19 Batches		

Professional Memberships	IE, IFERP, IAENG
<p>Conferences/ Seminars / Workshops / FDP Organised @ ALIET</p>	<ul style="list-style-type: none"> <li>• Acted as coordinator for <b>MAYUKHA</b>, a student national level technical symposium held in ALIET in AY 2011-12.</li> <li>• Acted as coordinator for <b>MAYUKHA</b>, a student national level technical symposium held in ALIET in AY 2012-13.</li> <li>• Acted as coordinator for <b>EPISTEMICON</b>, a student national level technical symposium held in ALIET from the AY 2013-14 till date.</li> <li>• Organized a <b>“FOUR DAY WORKSHOP ON NI-Lab VIEW”</b> from 19<sup>th</sup> to 22<sup>nd</sup> September 2016.</li> <li>• Organized and acted as a Speaker in a Two day Workshop on <b>“A Role of Transducers &amp; Programmable devices in control &amp; Medical Applications using IOT”</b> from 30<sup>th</sup> June to 31<sup>st</sup> June 2017.</li> <li>• Organized and acted as Speaker in a Three day Workshop on <b>“A Role of Transducers &amp; Programmable devices in control &amp; Medical Applications using IOT”</b> from 12<sup>th</sup> December to 14<sup>th</sup> December 2017.</li> <li>• Organized a Three day Workshop on <b>“RF Antenna Design”</b> from 27<sup>th</sup> June to 29<sup>th</sup> June 2018.</li> <li>• Organized and acted as Speaker in a Two day Workshop on <b>“A Role of Transducers &amp; Programmable devices in control &amp; Medical Applications using IOT”</b> from 13<sup>th</sup> Feb to 14<sup>th</sup> Feb 2019.</li> <li>• Organized a National Conference On <b>“Innovative Technologies And Data Communications Engineering”</b> on 22<sup>nd</sup> April 2017.</li> <li>• Act as a Co-Convener for National Conference On <b>“Communication, Electronics, Instrumentation and Computing”</b> on 15<sup>th</sup> March 2019.</li> </ul>

Other Responsibilities	<ul style="list-style-type: none"> <li>• College <b>NBA</b> coordinator</li> <li>• College <b>SC-ST Cell</b> Coordinator</li> <li>• <b>ACADEMIC</b> coordinator for ECE department.</li> <li>• NBA coordinator for ECE department</li> </ul>
Whether Ratified by University (Yes/No)	<b>YES</b>

## Faculty Development Programmes attended: 2019-20

Sl No	Title	No of days	Date		Orgnizer
1	FDP on Digital image processing using Matlab	4	24-04-2020	27-04-2020	skill to hire
2	Faculty Development Programme on SCILAB	5	29-04-2020	03-05-2020	PSCMRCET
3	Faculty Development Programme on Arduino	5	29-04-2020	03-05-2020	PSCMRCET
4	FDP online coolage mangement and online tools	3	30-04-2020	02-05-2020	Lala Lajpatrai College of Commerce & Economics & North Storm Academy.
5	FDP on Writing Quality Research Paper and Proposal	1	22-05-2020		International School of Management, Patna
6	FDP on Data Science and Machine Learning using Python	4	20-04-2020	23-04-2020	KLUniversity
7	FDP on Advanced Antenna Design Using HFSS	6	12-05-2020	17-05-2020	Santhiram Engg college
8	Faculty Development Programme on Arduino	6	20-05-2020	25-05-2020	Prakasam Engg College
9	FDP on Artificial intelligence and Its Applications	6	25-05-2020	30-05-2020	Ramachandra coll of Engg, Eluru
10	FDP on Microstrip Antenna for Advanced Wireless communication	2	15-05-2020	16-05-2020	Kallam haranadhareddy inst of tech
11	FDP and Online Training on "R Programming"	6	22-05-2020	28-05-2020	Prakasam Engineering College, Kandukur
12	FDP on Robotic process Automation	5	25-05-2020	29-05-2020	Usharama Coll of Engg & Tech
13	Faculty training program on cyber security	5	23-05-2020	27-05-2020	Srinivasa Ramanujan Institute of Technology
14	FDP on Online Teaching Etiquette and Best Practices	6	10-05-2020	15-05-2020	Santhiram Engg college

15	FDP on Data Science using Python	10	15-05-2020	24-05-2020	LBRC
16	FDP on ARTIFICIAL INTELLIGENCE	5	22-05-2020	26-05-2020	BVRIT Hyderabad
17	Challenges and advancement in the design of IoT, Embedded and VLSI systems	6	08-06-2020	13-06-2020	Gudlavaluru Engg Coll
18	Faculty Training Program (online) on "Cyber Security	5	23-05-2020	27-05-2020	Srinivasa Ramanujan Institute of Technology (Autonomous
19	FDP on IoT with Artificial Intelligence	3	27-05-2020	29-05-2020	Sri C R Reddy coll of Engg
20	Faculty Awareness Programme on NBA to keep in touch with NBA Accreditation	1	17-05-2020		PACE Int. Of Tech & Scienc
21	Faculty Awareness Program on "Research Methodology	6	20-05-2020	25-05-2020	Rajgad Dnyanpeeth's Shri Chhatrapati Shivajiraje College of Engineering, Pune
22	NAAC Awareness Programme for Faculty	7	08-05-2020	14-05-2020	Marathwada Mitra Mandal Institute of Technology (MMIT), Lohgaon, Pune
23	Faculty Program on NBA	1	09-05-2020		Bharati Vidyapeeth College Of Engineering, Navi Mumbai
24	Faculty Awareness Programme on Outcome Based Education (OBE) and NBA Accreditation	1	14-05-2020		Sinhgad Institute of Technology and Science, Narhe,Pune
25	FDP on Digital Teaching Techniques	6	29-06-2020	04-07-2020	ICT Academy

## Webinars attended: 2019-20

Sl No	Date	Title	Orgnizer
1	30-04-2020	Webinar on Artificial Intelligence & Machine Learning-Challenges, Opportunities and Emerging Applications"	K L University
2	15-05-2020	Digitalization	Srivenkateswarara coll of engg & tech., pondicherry
3	24-04-2020	Webinar on Examination reforms to complement OBE requirements	K L University
4	25-04-2020	A Webinar on Machine Learning Techniques for detection and classification	K L University

5	14-05-2020	8 webinar on OBE	Vmedulife
6	16-05-2020	Renewable energy using Matlab	GCE, Thanjavur & Pantech solutions
7	11-05-2020	A Webinar on Virtual Classroom Management using Microsoft Teams	LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
8	10-05-2020	Effective use of ICT Tools	Santhiram Engg coll
9	11-05-2020	THE NEED FOR CHANGE IN PEDAGOGY AND A SIMPLE WAY TO TEACH ONLINE WITH A SMARTPHONE FOR BEGINNERS	Usha Rama College of Engineering and Technology
10	01-05-2020	Enhancing Research Effectiveness using Scopus, Sciencedirect and Mendeley	FACULTY DEVELOPMENT CENTRE KURUKSHETRA UNIVERSITY, KURUKSHETRA
11	10-05-2020	Legal Challenges in Starting up a Buisness	Sri Venkateshwaraa College of Engineering and Technology, Puducherry
12	13-05-2020	What do we do on product based companies	Sri Venkateshwaraa College of Engineering and Technology, Puducherry
13	29-05-2020	Opportunities for Research with DRDO"	Defence Institute of Advanced Technology (DIAT), DRDO, Ministry of Defence, Govt. of India, A.V.C. COLLEGE OF ENGINEERING
14	11-06-2020	DESIGN OF MICROSTRIP PATCH ANTENNAS	Sri Venkateswara College of Engineering and Technology (Autonomous), Chittoor, Andhra Pradesh
15	18-06-2020 & 19-06-2020	Importance of Research and How to Prepare for Accreditation	Krishna Chaitanya Institute of Technology & Sciences, Markapur
16	17-06-2020	Research Issues in Bio-fabrication Systems	K.Ramakrishnan College of Technology, Samayapuram, Trichy
17	28-05-2020	5G Technology & Its Applications	Sri Vasavi Institute of Engg & Tech
18	10-06-2020	Antenna design: Recent trends and applications	Government Art College, Kulithalai, TN
19	29-05-2020	Webinar on " Use of OPEN STACK for Conducting Cloud Computing Focussed Research	K L University
20	24-04-2020	A Webinar on Examination reforms to complement OBE requirements	K L University
21	16-06-2020	Webinar on medical image processing using Python	Saveetha Engg Coll
22	14-06-2020	Webinar on medical video compression & its Applications	Saveetha Engg Coll
23	27-05-2020	Webinar on "Touching Sky Without Fear	PSCMR

24	08-06-2020 & 09-06-2020	Two days webinar on EM SIMULATION OF RF MODULES & ANTENNAS USING CST STUDIO SUITE	Delhi Technological University, Delhi
25	30-05-2020	webinar on Knowledge sharing on A to Z journals publications	IFERP
26	24-06-2020	webinar on Recent trends and techs in global communications	Saveetha Engg Coll
27	15-06-2020	Webinar on MEMS based sensor for chemical & biochemical sensing applications	Sri Vasavi Engg college, Tadepalligudem

## Quiz attended: 2019-20

Sl No	Date	Title	Orgnizer
1		Awareness on _Covid-19	Coll of Engg Vizianagaram. JNTUK
2	25-05-2020	electronics	Holy mary Inst
3	09-05-2020	Quiz on basics of computer and IT skills	Shree L . R . Tiwari College of Engineering
4	09-05-2020	Quiz on Recent Trends in IT	Shree L . R . Tiwari College of Engineering
5	21-05-2020	E-Quiz on Numerical Methods	Avvaiyar Government College for Women, Karaikal
6	14-05-2020	Awareness Program on Intellectual Property Rights	Shri Chhatrapati Shivajiraje College of Engineering
7	14-06-2020	National Level Online Quiz on "E-Learning	Padmabhushan Vasantdada Patil Pratishthan's College of Engineering Sion Mumbai- 22.
8	29-05-2020	quiz on "Fundamentals of Computer Networks	Holy Mary Institute of Technology & Science
9		Quiz on Intellctual property Rights	AMET, Chennai
10	03-06-2020	Quiz on " Basics of Microprocessors & Microcontrollers	Holy Mary Institute of Technology & Science
11	31-05-2020	Quiz on "Digital System Design with ASM Charts	Holy Mary Institute of Technology & Science
12	31-05-2020	National Level Quiz on NBA	P.V.P.P. College of Engineering, Mumbai
13	28-05-2020	GATE Syllabus Based Technical Quiz Phase-I	Mahendra Institute of Technology

## Workshops attended: 2019-20

Sl No	No of Days	Date	Title	Orgnizer
1	6	25-05-2020 to 30-05-2020	Robotics Powerd by ROS	G.Narayanamma Institute of Technology and Science
2	2	16-05-2020 & 17-05-2020	VLSI circuits analog & digital design perspectives	JNTUA
3	3	25-06-2020 to 27-06-2020	Workshop HANDS-ON EXPERIENCE WITH ARDUINO USING VIRTUAL TOOL	Potti sriramulu C M R Coll of Engg & Tech

## Other Programs Attended 2019-2020

Program	No of Days	Date	Title	Orgnizer
International Conference	3	15-05-2020 to 17-05-2020	International E-Conference on “Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World”	Gov. Vidarbha institute of science & Humanities, Gov of Maharashtra
International Symposium	1	09-06-2020	Interdisciplinary international symposium COVID 19 socio economic and traumatic challenges impacting migrant workers	ALIET
Industry Focused program	5	22-06-2020 to 26-06-2020	The role of engineers in Making India a five trillion dollars economy	UNITIEUP

## RESEARCH PUBLICATIONS:

### List of Publications (Conferences):

1. “IMAGE PROCESSING BASED INTELLIGENT TRAFFIC CONTROLLING AND MONITORING SYSTEM USING ARDUINO” - 2016 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICT), 978-1-5090-5240-0/16 ©2016 IEEE.
2. “Fm0 and Manchester Encoding Using Sols Technique with Clock Gating & Power Gating Methods”. International Conference on Communication and Signal Processing, April 6-8, 2017, India. 978-1-5090-3800-8/17 ©2017 IEEE.

3. **“A CPW Fed Patch Antenna Design for Weather Monitoring, Air Traffic Control and Defence Tracking Applications”**. Proceedings of the Fourth International Conference on Computing Methodologies and Communication (ICCMC 2020)IEEE Xplore Part Number: CFP20K25-ART; ISBN:978-1-7281-4889-2

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

1. **“Multi Point Short Range Wireless Data Communication System Using Zigbee Network”** - International Journal of Research in Computer Engineering and Electronics. 1 ISSN 2319-376X VOL: 1 ISSUE:2 Oct’12.
2. **"Design and Analysis of monopole Antenna With Two Layered EBGs at One Side"**- International journal Of Advanced Research In Computer And Communication Engineering,, Volume 2, Issue 4, April 2013.
3. **"Energy Efficiency Of MIMO-OFDM Communication System"** in International journal Of Engineering Research And Applications,, Volume 4, Issue.
4. **“Resource Allocation And Identification Of OFDM Signals In Distributive Antenna Systems”** - International Journal of Engineering In Advanced Research Science and Technology ISSN: 2278-256, November 2016, VOLUME -2, ISSUE-4, Page:7911-17.
5. **“Gesture and Joystick Controlled Multipurpose Automated Wheelchair”** - Indian Journal of Science and Technology, Vol 10(33), DOI: 10.17485/ijst/2017/v10i33/117230, September 2017, ISSN (Print) : 0974-6846, ISSN (Online) : 0974-5645.
6. **“Design Of Low Power 4bit Synchronous Counter Using Adiabatic Logic”**,- SSRG International Journal of Computer Trends and Technology (IJCTT) - Special Issue – April 2017.
7. **“Door Unlock using Face Recognition”**- *International Journal of Advanced Research in Electronics and Communication Engineering (IJARECE)* Volume 6, Issue 4, April 2017.
8. **“A Novel Spectrum Sensing Method in Imperfect Channels”** - International Journal for Modern Trends in Science and Technology , Volume: 03, Issue No: 06, June 2017.
9. **“Rotation Invariant Local Maximum Edge Binary Pattern (LMEBP) based Segmentation of Defocus Blur”** - IJRECE , VOL. 5, ISSUE 2 APR.-JUNE. 2017, ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281 (ONLINE).
10. **“A Novel Method for Low Resolution Video Enhancement using Super Resolution Technique”** - International Journal of Advanced Scientific Research and Management, Vol. 3 Issue 7, July 2018: ISSN 2455-6378.
11. **Reconfigurable Antenna using Micromechanical Actuation Switches for K and Ku-Band Applications**. International Journal of Engineering and Advanced Technology (IJEAT), Volume Volume 9, Year 2019, Pages 201-205.



- 12. Design and Implementation of IoT Based Smart Shopping Cart using RFID Technology.** IJRECE, Volume Volume 7, Year 2019, Pages 1359-1362.
- 13. Design and implementation of multipurpose agribot using python & raspberrypi.** IJRECE, Volume Volume 7, Year 2019, Pages 1394-1396
- 14. DESIGN A FREQUENCY RECONFIGURABLE MICROSTRIP PATCH ANTENNA For satellite communication.** International journal of recent technology and engineering (ijrte). , volume 8, year 2019, pages 2498 to 2504.
- 15. A Novel Design And Simulation Of U-Shaped Microstrip Patch Antenna For Future 5G Mobile Communication.** International journal of scientific & technology research. Volume volume 9, year 2020, pages 607-616

### **WORKSHOPS & SEMINARS:**

- Participated in “**EMPOWERS PROGRAMME-2012**” from 8<sup>th</sup> to 15<sup>th</sup> Feb 2012.
- Participated in “**SIX DAY WORKSHOP FOR FACULTY ON ANALOG SYSTEM DESIGN USING TEXAS INSTRUMENTS ANALOG SYSTEM LAB KIT (ASLK)**” form 4<sup>th</sup> to 9<sup>th</sup> June 2012.
- Participated in “**FALCON ELECTRO-TEK PVT.LTD**” on 22<sup>th</sup> June 2012.
- Participated in “**TWO DAY WORKSHOP FOR FACULTY ON SYSTEM DESIGN USING XILINX FPGA**” on 27<sup>th</sup> & 28<sup>th</sup> June 2013.
- Participated in an International Seminar on “**The Unknowable and the Counterintuitive: The Surprising Insights of Engineering**” on 6<sup>th</sup> July 2013.
- Participated in the National seminar on “ **TRAINING IN LAY COLLABORATION**” from 4-6 October 2013.
- Participated in “**ADVANCED TRENDS IN EMBEDDED SYSTEMS**”, **ATES-2014** on 28<sup>th</sup> Feb-1<sup>st</sup> March 2014.
- Participated in “**OVERVIEW ON LATEST TELECOM TECHNOLOGIES**” by **BSNL** from 9-2-2015 to 11-2-2015.
- Participated in “**ENGINEERING EDUCATION AND RESEARCH SEMINAR**” on 19<sup>th</sup>

August 2015.

- Participated on **“BIO-SIGNAL PROCESSING AND MEASUREMENTS AND COMPUTING EVERYWHERE”** from 26-28 NOVEMBER 2015.
- Participated in **“MATLAB, SIMULINK & RELATED TOOL BOXES FOR ENGINEERING EDUCATION”** on 11<sup>th</sup> & 12<sup>th</sup> December 2015.
- Participated in **“MATLAB, SIMULINK FOR ENGINEERING EDUCATION”** on 5<sup>th</sup> February 2016.
- Participated in **“A ONE DAY NBA ORIENTATION PROGRAM”** on 6<sup>th</sup> June 2016.
- Participated in **“Applications of Lab VIEW & MULTISIM”** on 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> June 2016.
- Participated in the **“NPTEL workshop”** on 25-6-2016.
- Participated a three day FDP on **“VLSI DESIGN TECHNIQUES USING XILINX & MENTOR GRAPHICS EDA TOOLS”** on 23<sup>rd</sup> to 25<sup>th</sup> June 2016.
- Participated in **“A Two Day workshop on Mentor Graphics EDA Tools”** on 17<sup>th</sup> & 18<sup>th</sup> April 2017.
- Participated in **“A Three Day FDP on Industrial IoT using NI Graphical Syatem Design Platform”** from 13<sup>th</sup> July to 15<sup>th</sup> July 2017.
- Participated in a six day FDP on **” Machine Learning applications in Signal Processing”** from 4-9th Feb 2019, held at Gudlavalleru college of Engineering, organized by E& ICT academy NIT Warangal.