ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada)
Accredited by NAAC, NBA & An ISO 9001:2015 Certified Institution
ITI Road, ALC Campus, VIJAYAWADA-520008 :: Website : aliet.ac.in :: Ph:0866-2476161

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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 1ˢᵗ Class with Distinction from AU	
	UG: B.Tech with First Class from JNTUH	
Employee ID	**ALIET-11-02**	
E-Mail	**smr.aliet@gmail.com**, smr.aliet@aliet.ac.in	
Blogger/ website/ webpage	**smallikharjun.blogger.com**	
Total Experience in Years	**Teaching: 12+ years**	**Industry: 0 years**
Papers Published	**National: 00**	**International: 23**
Papers presented in Conferences	**National: 00**	**International: 05**
Book Chapters	**01**	
Projects Guided	**Projects at Masters Level: 05**	
	Projects at UG Level: 21 Batches	

Professional Memberships	**IE, IFERP, IAENG**
Conferences/ Seminars / Workshops / FDP Organised @ ALIET	- Acted as coordinator for **MAYUKHA**, a student national level technical symposium held in ALIET in AY 2011-12. - Acted as coordinator for **MAYUKHA**, a student national level technical symposium held in ALIET in AY 2012-13. - Acted as coordinator for **EPISTEMICON**, a student national level technical symposium held in ALIET from the AY 2013-14 till date. - Organized a **"FOUR DAY WORKSHOP ON NI-Lab VIEW"** from 19th to 22nd September 2016. - 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 30th June to 31st June 2017. - Organized and acted as Speaker in a Three day Workshop on **"A Role of Transducers & Programmable devices in control & Medical Applications using IOT"** from 12th December to 14th December 2017. - Organized a Three day Workshop on **"RF Antenna Design"** from 27th June to 29th June 2018. - Organized and acted as Speaker in a Two day Workshop on **"A Role of Transducers & Programmable devices in control & Medical Applications using IOT"** from 13th Feb to 14th Feb 2019. - Organized a National Conference On **"Innovative Technologies And Data Communications Engineering"** on 22nd April 2017. - Act as a Co-Convener for National Conference On **"Communication, Electronics, Instrumentation and Computing"** on 15th March 2019.
Other Responsibilities	- College - **NBA** coordinator - College - **SC-ST Cell** Coordinator
Whether Ratified by University (Yes/No)	**YES**

RESEARCH PUBLICATIONS:

List of Publications:

Sl. No.	A.Y	Title	Journal Name	Index
1	2021-2022	COMPREHENSIVE ANALYSIS AND DESIGN OF CAPACITIVE RF MEMS SWITCHES FOR RECONFIGURABLE MICROSTRIP PATCH ANTENNA	Wireless Personal Communications	SCI, Scopus, WoS
2	2021-2022	STRUCTURAL AND MATERIAL BASED COMPREHENSIVE PERFORMANCE ANALYSIS ON SHUNT CAPACITIVE RF MEMS SWITCH	Journal of Engineering Science and Technology	WoS, Scopus
3	2021-2022	DESIGN AND ANALYSIS OF RECONFIGURABLE ANTENNA FOR WIDE BAND APPLICATIONS	Journal of Physics: Conference Series	Scopus
4	2021-2022	TARGET APPLICATION BASED DESIGN APPROACH FOR RF MEMS SWITCHES USING ARTIFICIAL NEURAL NETWORKS	Transactions on Electrical and Electronic Materials	Springer & Scopus
5	2020-2021	MICRO MECHANICAL THIN FILM STRUCTURES SPRING CONSTANT ANALYSIS AND DESIGN OF SHUNT CAPACITIVE RF MEMS SWITCHES	International Journal of Emerging Trends in Engineering Research	Wos, UGC
6	2020-2021	DESIGN AND ANALYSIS OF RF MEMS SWITCH FOR HIGH-FREQUENCY APPLICATIONS	International Journal of Engineering Trends and Technology	Scopus
7	2020-2021	DESIGN AND ADVANCED MODELING OF ELECTROMAGNETIC AND ELECTRO-MECHAICAL PROPERTIES OF RECONFIGURABLE ENVIRONMENTAL SAFE ANTENNA USING RF MEMS SWITCH	Journal of Green Engineering	Scopus
8	2020-2021	RECONFIGURABLE ANTENNA USING RF MEMS SWITCHES ISSUES AND CHALLENGES: A SURVEY	Springer Nature, Advances in Smart System Technologies, Advances in Intelligent Systems and Computing	Springer & Scopus

9	2019-2020	DESIGN A FREQUENCY RECONFIGURABLE MICROSTRIP PATCH ANTENNA FOR SATELLITE COMMUNICATION	International Journal of Recent Technology and Engineering (IJRTE)	UGC
10	2019-2020	RECONFIGURABLE ANTENNA USING MICROMECHANICAL ACTUATION SWITCHES FOR K AND KU-BAND APPLICATIONS	International Journal of Engineering and Advanced Technology (IJEAT)	UGC
11	2019-2020	A NOVEL DESIGN AND SIMULATION OF U-SHAPED MICROSTRIP PATCH ANTENNA FOR FUTURE 5G MOBILE COMMUNICATION	INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH	UGC
12	2018-2019	DESIGN AND IMPLEMENTATION OF IOT BASED SMART SHOPPING CART USING RFID TECHNOLOGY	International Journal of Research in Electronics and Computer Engineering (IJRECE)	UGC
13	2018-2019	DESIGN AND IMPLEMENTATION OF MULTIPURPOSE AGRIBOT USING PYTHON & RASPBERRY-PI	International Journal of Research in Electronics and Computer Engineering (IJRECE)	UGC
14	2018-2019	A NOVEL METHOD FOR LOW RESOLUTION VIDEO ENHANCEMENT USING SUPER RESOLUTION TECHNIQUE	International Journal of Advanced Scientific Research and Management	UGC
15	2017-2018	ENHANCEMENT USING SUPER RESOLUTION TECHNIQUE	International Journal for Modern Trends in science and Technology	UGC
16	2017-2018	ROTATION INVARIANT LOCAL MAXIMUM EDGE BINARY PATTERN(LMEBP) BASED SEGMENTATION OF DEFOCUS BLUR	International Journal of Research in Electronics and Computer Engineering(IJRECE)	UGC
17	2017-2018	GESTURE AND JOYSTICK CONTROLLED MULTIPURPOSE AUTOMATED WHEELCHAIR	Indian Journal of Science and Technology	UGC

18	2016-2017	DOOR UNLOCK USING FACE RECOGNITION	International Journal of Research in Electronics and Computer Engineering (IJRECE)	UGC
19	2016-2017	DESIGN OF LOW POWER 4BIT SYNCHRONOUS COUNTER USING ADIABATIC LOGIC	IJCTT	UGC
20	2016-2017	RESOURCE ALLOCATION AND IDENTIFICATION OF OFDM SIGNALS IN DISTRIBUTIVE ANTENNA SYSTEMS	International Journal of Engineering In Advanced Research Science and Technology	UGC
21	2015-2016	ENERGY EFFICIENCY OF MIMO-OFDM COMMUNICATION SYSTEM	Journal of Engineering Research and Applications	UGC
22	2012-2013	DESIGN AND ANALYSIS OF MONOPOLE ANTENNA WITH TWO LAYERED EBGS AT ONE SIDE	International Journal of Advanced Research in Computer and Communication Engineering	UGC
23	2012-2013	MULTI POINT SHORT RANGE WIRELESS DATA COMMUNICATION SYSTEM USING ZIGBEE NETWORK	International Journal of Research in Computer Engineering and Electronics	UGC

Book Chapter:

Sl. No.	A.Y	Title	Journal Name	Index
1	2020-2021	RECONFIGURABLE ANTENNA FOR SATELLITE APPLICATIONS USING MICROMECHANICAL ACTUATION SWITCHES	Recent Developments in Engineering Research Vol. 6	Book Chapter

International Conferences:

1	2022-2023	Machine Learning Approach to Design Fractal Antenna for 5G Applications	2022 4th International Conference on Inventive Research in Computing Applications (ICIRCA) 21-23 September 2022	IEEE, Scopus
2	2021-2022	MACHINE LEARNING APPROACH TO DESIGN FRACTAL ANTENNA FOR 5G APPLICATIONS	Proceedings of the International Conference on Inventive Research in Computing Applications (ICIRCA 2022)	IEEE, Scopus
3	2021-2022	DESIGN & ANALYSIS OF FREQUENCY RECONFIGURABLE MICROSTRIP PATCH ANTENNA FOR Ku/K BANDS APPLICATIONS USING PIN DIODE	Proceedings of the Second International Conference on Smart Electronics and Communication (ICOSEC).	IEEE, Scopus
4	2019-2020	A CPW FED PATCH ANTENNA DESIGN FOR WEATHER MONITORING, AIR TRAFFIC CONTROL AND DEFENSE TRACKING APPLICATIONS	Proceedings of the Fourth International Conference on Computing Methodologies and Communication (ICCMC 2020)	IEEE, Scopus
5	2016-2017	FM0 AND MANCHESTER ENCODING USING SOLS TECHNIQUE WITH CLOCK GATING & POWER GATING METHODS	International Conference on Communication and Signal Processing	IEEE, Scopus
6	2015-2016	IMAGE PROCESSING BASED INTELLIGENT TRAFFIC CONTROLLING AND MONITORING SYSTEM USING ARDUINO	International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT)	IEEE, Scopus

Patent Publications:

1	A SERPENTINE SHUNT CAPACITIVE RF MEMS SWITCH FOR SELECTIVE APPLICATIONS USING BILAYERED NEURAL NETWORKS WITH BACK PROPAGATION. **Published on 15-07-2022.**

Faculty Development Programmes attended: 2023-2024

Sl No	Title	No of days	Date		Organizer
1	FDP on Inculcating Universal Human Values in Technical Education	5	11-09-2023	15-09-2023	AICTE
2	FDP on Soft Computing Algorithms: Basics and Applications	5	09-10-2023	13-10-2023	NITTR Chandigarh

Faculty Development Programmes attended: 2022-2023

Sl No	Title	No of days	Date		Organizer
1	FDP on Contemporary Techniques In Electronics and Communications Engineering	6	20-07-2022	25-07-2022	SREC
2	VLSI Devices and Circuits for AI Applications	5	19/09/2022	23/09/2022	NITTR Chandigarh
3	MATLAB - Artificial Intelligence and Optimisation Techniques	5	21/11/2022	25/11/2022	NITTR Chandigarh
4	21st Century Skills & Teaching Methodologies	4	19-12-2022	22-12-2022	APSCHE, Andhrapradesh

Faculty Development Programmes attended: 2021-2022

Sl No	Title	No of days	Date		Organizer
1	FDP on Microwaves and Beyond Techniques	6	15-11-2021	20-11-2021	SRM University
2	FDP on Advancements on Antenna Technologies for Future Applications	6	14-02-2022	19-02-2022	VR Sidhartha Engg. College
3	FDP on Advanced Signal Processing, Communications using AI and ML Techniques	5	21-03-2022	25-03-2022	GMRIT

		40 Hour	04-10-2021	13-10-2021	NIT, Warangal
4	FDP on AWS and Machine Learning				

Faculty Development Programmes attended: 2020-2021

Sl No	Title	No of days	Date		Organizer
1	FDP on Antenna and Microwave Engineering	6	08-06-2020	13-06-2020	KRCT, Thiruchirappali
2	FDP on AI & Deep Learning	60 Hours	01-07-2020	28-07-2020	APSSDC
3	FDP on Recent Trends in IoT using Embedded systems	2 weeks	01-02-2021	13-02-2021	MIT, Hyderabad
4	FDP on Advanced Electromagnetics and Applications	5	24-05-2021	28-05-2021	SSNCE, Kalavakkam, Chennai

Faculty Development Programmes attended: 2019-20

Sl No	Title	No of days	Date		Organizer
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 comunication	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 avancement in the design of IoT, Embedded and VLSI systems	6	08-06-2020	13-06-2020	Gudlavalleru 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	Organizer
1	30-04-2020	Webinar on Artificial Intelligence & Machine Learning-Challenges, Opportunities and Emerging Applications"	K L University

2	15-05-2020	Digitalization	Srivenkateswaraa 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 sesnsing applications	Sri Vasavi Engg college, Tadepalligudem

Quiz attended: 2019-20

Sl No	Date	Title	Organizer
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	Organizer
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	Organizer
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 progam	5	22-06-2020 to 26-06-2020	The role of engineers in Making India a five trillion dollars econamy	UNITIEUP

- Participated in **"EMPOWERS PROGRAMME-2012"** from 8th to 15th Feb 2012.

- Participated in **"SIX DAY WORKSHOP FOR FACULTY ON ANALOG SYSTEM DESIGN USING TEXAS INSTUMENTS ANALOG SYSTEM LAB KIT (ASLK)"** form 4th to 9th June 2012.

- Participated in **"FALCON ELECTRO-TEK PVT.LTD"** on 22th June 2012.

- Participated in **"TWO DAY WORKSHOP FOR FACULTY ON SYSTEM DESIGN USING XILINX FPGA"** on 27th & 28th June 2013.

- Participated in an International Seminar on **"The Unknowable and the Counterintuitive: The Surprising Insights of Engineering"** on 6th 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 28th Feb-1st 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 19th 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 11th & 12th December 2015.

- Participated in **"MATLAB, SIMULINK FOR ENGINEERING EDUCATION"** on 5th February 2016.

- Participated in **"A ONE DAY NBA ORIENTATION PROGRAM"** on 6th June 2016.

- Participated in **"Applications of Lab VIEW & MULTISIM"** on 8th, 9th, 10th 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 23rd to 25th June 2016.

- Participated in **"A Two Day workshop on Mentor Graphics EDA Tools"** on 17th & 18th April 2017.

- Participated in **"A Three Day FDP on Industrial IoT using NI Graphical Syatem Design Platform"** from 13th July to 15th 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.