

## Dr.ANKARAO MOGILI M.Tech., Ph. D.

#### **Assistant Professor of EEE**

Jawaharlal Nehru Technological University College of Engineering

## Anantapur

Ananthapuramu − 515 002, Andhra Pradesh,

https://www.jntuacea.ac.in/pdfs/ANKARAO.pdf

# **Bio-data**

Name : Ankarao Mogili

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Nationality : Indian

Religion : Hindu

# **Educational Qualifications:**

S. No.	Qualification	University/Institution	Specialization	Year of award
1.	Ph. D	JNTU Anantapur	Power electronics and Industrial Drives	2020
2.	M.Tech	JNTUA, College of Engineering, Anantapuram	Power & Industrial Drives	2010
3.	B.Tech	Andhra University  (GITAM College of Engineering)	Electrical & Electronics Engineering	2006

# Professional Experience :

S.No.	Institution/Organization	Position held	Duration
1	JNTUA College of	Assistant Professor	2016 - till date
1	Engineering, Anantapur	(Senior Scale)	2010 - till date
		Department of EEE	
2	JNTUA College of	Assistant Professor	2011 2016
2	Engineering, Anantapur	Department of EEE	2011 – 2016

## Administrative Experience

S.No.	Administrative Post held	Duration
1.	Officer incharge of Academic Section in JNTUA College of	2021 -2022
	Engineering, Anantapuram	
2.	Public Relations Officer(PRO) in JNTUA Anantapur	2016 -2019
3.	Deputy Warden for Lepakshi Hostel, JNTUA College of Engineering, Anantapur	2015 -2016
4.	Head of Electrical & Electronics Engineering Department,	2014-2015
	JNTUA College of Engineering, Kalikiri	
5.	Officer incharge of hostels, JNTUA College of Engineering, Kalikiri	2014-2015
6.	EC member for JNTUA College of Engineering, Anantapur	2011-2013
7.	Deputy Warden for Ellora Hostel, JNTUA College of Engineering, Anantapur	2011-2014

The following Seminars / workshops are organized as a Convener / Coordinator. Organized the following programs as Coordinator:

- ❖ Organized one day National level student symposium on "Electrify your Education" (EYE2K12) on March 14th 2012 at JNTUA Electrical Dept.
- ❖ Organized two day National level student symposium on "Electrify your Education" (EYE2K13) on March 14th 2013 at JNTUA Electrical Dept.

Teaching Experience: 12+ years of teaching UG & PG Courses

Subjects Taught:

Undergraduate courses	Post graduate courses
<ul><li>Power Electronics</li><li>Control Systems</li></ul>	<ul><li>Advanced digital signal processing (ADSP)</li></ul>
<ul> <li>Control Systems</li> <li>Electrical Machines</li> <li>Power semiconductor controlled drives</li> <li>Human values and professional ethics</li> <li>Microprocessors and Microcontrollers</li> </ul>	<ul> <li>Machine Modeling analysis</li> <li>Switched Mode Power Conversion (SMPC)</li> <li>Special Machines</li> <li>Wind energy conversion systems</li> <li>Solid state AC &amp; DC drives</li> <li>Advanced power semiconductor devices</li> </ul>

❖ In addition, the laboratories of UG and PG programs in the areas of Electrical and Computers have been dealt with.

#### RESEARCH EXPERIENCE & GUIDANCE PROVIDED:

- A) Ph.d students under my supervision :02
- B) Publications: Involved in active research in the following fields of Engineering & Technology.

Power Electronics &Industrial Drives

**Control Systems** 

**Artificial Neural Networks** 

- C) Published 46 research papers in various National & International Journals, National & International Conferences, workshops and symposiums.
- D) Guiding Research:

M.Tech Level ... Guided 55 M. Tech dissertations.

B.Tech Level ... Guided more than 10 B.Tech project batches.

#### Reviewer of Journals

- ❖ Journal of Electrical Engineering & Technology, Springer Journal
- ❖ Journal of Supercomputing (SUPE), Springer journal
- ❖ Journal of The Institution of Engineers (India): Series B, IEI journal Membership of Scientific / Engineering Bodies
  - ❖ Member of Institution of Engineers (MIE)

## Number of Research publications:

International Journals : 39
International Conferences : 06
National Conferences : 01

### List of publications: International Journals:

S. No	Paper Title	Journal Name, Volume & Issue	Year/ month of Publication
1	Implementation of PI, Fuzzy & ANN controllers to improve dynamic response of Vector Controlled Induction Motor Drive		July, 2015
2	Comparison of different controllers for the improvement of dynamic response of indirect Vector Controlled Induction Motor Drive	IJERA, Vol. 5, No. 7,	July, 2015
3	Comparison of speed controlling Techniques of Field-Oriented Controlled Induction Motor Drives	IJAREEIE, Vol. 4, No. 7,	July, 2015
4	MRAS and Adaptive Observer Techniques for speed estimation in Sensorless Vector Controlled Induction Motor Drive	IJAREEIE, Vol. 4, No. 7,	July, 2015
5	Speed estimation of Sensorless Vector Controlled Induction Motor Drive using ANN		July, 2015
6	Estimation of rotor	IJAREEIE, Vol. 4, No. 7,	July, 2015

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	velocity in Induction Motor Drive using Sliding Mode Observer		
7	Speed & Torque analysis of IVCIM drive using Fuzzy MRAC	IJAREEIE, Vol. 4, No. 7,	July, 2015
8	Estimation of speed and Parameter identification in Sensorless IM drive By using Second order Sliding-mode Observer and MRAS techniques	IRJET,Vol.2, No.4,	July, 2015
9	Estimation of speed in linear induction motor drive by MRAS using neural network and sliding mode control	IJDACR, Vol. 4, No.2,	Sept, 2015
10	Torque Controller of BLDC Motor using ANFIS Controller	IJSRD, Vol. 3, No. 8,	Aug, 2015
11	A New rotor flux estimator for the torque MRAS based Sensorless Induction motor drive	IRJET, Vol 3, No. 11	Nov, 2016
12	Adapative Sliding mode- MRAS strategy for Sensorless speed control of SPIM drives	IRJET, Vol 4,No. 1	Jan,2017
13	Speed control of parallel connected DSIM fed by six phase inverter with IFOC strategy using ANFIS	IJSRST, Vol.3,No.7	Oct,2017
14	Fuzzy Based Solar PV- Powered SRM Drivefor Electric Vehicles	IJIRSET,Vol.6,No.8	Aug,2017
15	Constant Switching Frequency Predictive CurrentControl Technique with Fuzzy Logic Controller for Field Oriented Permanent Magnet Synchronous Motor Drive	IJRASET,Vol.5,No.11	Nov,2017
16	Speed control and parameter variation of induction motor drives using Fuzzy logic &ADRC controllers	IRJET,Vol.4,No.12	Dec,2017

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17	Open Ended Winding Motor Drive Using A Floating Bridge Multi- Level Converter		Feb,2018
18	Simulation of 7 level AC-AC Sparse modular multi-level converter	IJEAS.Vol.5,No.10	Oct,2018
19	Simulation of Fuzzy based M3C-UPQC for power quality improvement in power grid	IJEAS.Vol.5,No.10	Oct,2018
20	Speed Control of Oscillation Free IM Drive Using Adaptive-Fuzzy Sliding Mode Control	IJSETR,Vol.7,No.3	March,2018
21	An Adaptive Neuro Fuzzy based SMO for Speed Estimation of SensorlessInduction Motor Drives at Zero and Very Low Speeds	IRJET,Vol.6,No.7	July,2019
22	Improvement of Fast Initial Speed Estimation Using Fuzzy Logic Control Technique for Induction Motors in the Low Speed Range	IJITEE,Vol.8,No.11	Sep,2019
23	Self-Tuning PID Controller with Genetic Algorithm Based Sliding ModeMRAS for Induction Motor Drive	IRJET,Vol.6,No.6	June,2019
24	A Modified MPPT Algorithm for PV Systems with Climatic Parameters Estimation	IJRASET,Vol.8,Issue 5	May,2020
25	Simplified Predictive Torque Control Scheme for Open End Winding Induction Motor Using ANFIS Controller	IJMPERD,Vol.10,Issue.3	June,2020
26	Sensor less Speed Estimation of Brushless Doubly-Fed Reluctance Generator using Active Power Base MRAS by PI and ANIFS Controller	IJMPERD,Vol.10,Issue.3	June,2020
27	A Decoupling Estimation Scheme for Rotor Resistance and Mutual Inductance in Indirect	IJMPERD,Vol.10,Issue.3	June,2020

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	Vector Controlled Induction Motor Drives by Using PI and ANIFS Controller		
28	Improved MRAS Based Rotor Time Constant Estimation in Induction Motor Drive by Employing the Dot Product of Stator Current and Rotor Flux by ANFIS Controller	IJMPERD,Vol.10,Issue.3	June,2020
29		IJMPERD,Vol.10,Issue.3	June,2020
30	Parameters Estimation and Auto-Tuning of a Discrete-Time Model Predictive Speed Controller of Induction motor Drives by ANFIS Controller	IJMPERD,Vol.10,Issue.3	June,2020
31	SMCC Based Integral Sliding and Solar PV Based Induction Motor Drive for Water Pumping using a Fuzzy Controller		NOV,2021
32	Determination of Stator Resistance In Sensor Less Induction Motor Drive Through Modified DC injection by Employing ANFIS Controller	Design Engineering(Scopus),Issue.7	NOV,2021
33	NPC Inverter Supplied Induction Motor Drive With ANFIS Controller By Passivity Based Model Predictive Control	Design Engineering(Scopus), Issue.7	NOV,2021
34	Hybrid PV-Wind Energy System Connected to the Grid Using Dynamic Voltage Restorer Based on SMES and Battery for Mitigation of Voltage Sag	Design Engineering(Scopus), Issue.8	NOV,2021

35	Dynamic Identification of Induction Motor Drives by using FUZZY and PI Controllers	Engineering(Scopus),	NOV,2021
36	Single Stage Autonomous Solar Water Pumping System Using PI and Fuzzy Controllers	Engineering(Scopus),	NOV,2021
37	Implementation Of Wind Turbine System Using Fuzzy Controlled Based Induction Motor Drive	E	NOV,2021
38	Control of Low Voltage Ride through for PMSG Wind Turbines and Energy Storage Systems using ANFIS Controller	1	NOV,2021
39	GWO Based MPPT Technique for Standalone PV System		NOV,2021

# Conference:

S. No	Paper Title	Conference Name, Volume & Issue	Year/ month of Publication
1	MRAS and Adaptive Speed Observer techniques by using Fuzzy controller in Sensorless vector control Induction motor drive	ICREU	Jan,2016
2	Simulation of Indirect Field Oriented Control of Induction Motor Drives using SMO based MRAS by ANFIS controller		2018
3	Dynamic Performance Analysis of Reactive Powerand Improved	ICPEICES	2018

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Motor Drives		
Employing PI and		
FuzzyController		
Implementation of		2019
Fuzzy based Second		
order Sliding mode		
Observer fed Induction		
motor drive for		
Disturbance Rejection		
analysis		
Reduction of Effective		2019
Disturbance in Six-		
Phase Induction		
Machine employing		
Field Oriented control		
Strategy		
Predictive control of	ICAPHMA	2021
AFE Rectifier using		
Fuzzy Controller		
		Jan 2021
control of AFE		
Rectifier using fuzzy		
controller with robust		
adaptive Inductance		
estimation		
	FuzzyController Implementation of Fuzzy based Second order Sliding mode Observer fed Induction motor drive for Disturbance Rejection analysis Reduction of Effective Disturbance in Six- Phase Induction Machine employing Field Oriented control Strategy Predictive control of AFE Rectifier using Fuzzy Controller Sensorless predictive control of AFE Rectifier using fuzzy controller with robust adaptive Inductance	MRAS forInduction Motor Drives Employing PI and FuzzyController Implementation of Fuzzy based Second order Sliding mode Observer fed Induction motor drive for Disturbance Rejection analysis Reduction of Effective Disturbance in Six- Phase Induction Machine employing Field Oriented control Strategy Predictive control of AFE Rectifier using Fuzzy Controller Sensorless predictive control of AFE Rectifier using fuzzy controller with robust adaptive Inductance

# WORKSHOP ATTENDED

S.No	Name of the workshop	Month & Year
1	Service oriented architecture and cloud	July,2011
	computing	
2	Simulation of Power Electronics and drives	June,2011
3	Smart Grid	Jan,2012
4	Technology Enhanced Learning through	Apr,2014
	IEEE for Imparting Quality Higher	
	Education	
5	Outcome based Education approach in	Aug,2014
	Engineering Curriculum	
6	MATLAB, Simulink and related toolboxes	Oct,2015
	for Engineering education	
7	Awareness on Power systems Simulation	Sep,2015
	analysis using Mi power software	
8	Cyber Security	Oct,2015
9	Awareness on IT/ITES job roles and Big	Aug,2015

	data analytics	
10	Leveraging the power of Networking to	Sep,2016
	unlock the potential of Entrepreneurship	
11	Solar power Technologies	Apr,2016
12	Wind Energy conversion Systems	Apr,2016
13	NSS Youth Festival	Jan,2016
14	NSS Youth Festival	Jan,2017
15	Benefits of Engaging with International	Aug,2018
	organizations	
16	Prospective Energy Sources-Wind &Solar	March,2018
	PV systems	
17	Big data applications in Power systems	Sep,2018
18	Pedagogical Skills for outcome based	Nov,2018
	education	
19	Experimental approaches & Instrumental	Feb,2019
	aspects in Analytical Chemistry	
20	Intelligent Optimization techniques for	Aug,2019
	Engineering problems	
21	Power Electronics for Power Engineers	Oct,2019
22	Electro Ceramics	Sep,2019
23	Materials for Energy conversion & storage	Dec,2019
24	devices	N 2010
24	Waste Management	Nov,2019
25	NAAC Awareness program	Jan,2020
26	Power Electronics, Control and Machines	Dec, 2019
27	for Microgrid System	D 2010
27	Advanced Signal Processing Techniques in	Dec, 2019
	Imagng, Radar & 5G Communication Networks	
28	Circuits and systems with Emerging Sub-	Dog. 2010
20	Micron Technology	Dec, 2019
29	National Education Policy 2020-	Feb-2021
29	Perspective	1.60-7071
30	Recent Trends in Smart Grid	Oct-2019
30	Recent Hends III Smart Ond	OCI-2019

### FACULTY DEVELOPMENT PROGRAM

S.No	Name	Month & Year
1	Research Methodology	Aug,2012
2	Entrepreneurship	July,2015
3	Big data analysis	Feb,2017
4	Reinforcing professional communication skills for teaching faulty	June,2018
5	Soft skills & Personality development	Dec,2018
6	Innovative Teaching-Learning techniques in Higher education	Sep,2019
7	Research Methodology & Data Analysis	Sep, 2019
8	Awareness on Electric\Hybrid vehicle Engineering	Jan, 2020
9	Challenges & opportunities of energy and sensor	Sep 2020

	applications	
10	Management of online teaching, learning and assessment in higher education	Sep, 2020
11	Mathematical modelling and simulation for scientists & engineers	Feb, 2020
12	Renewable and clean energy conversion technologies and materials	Jan, 2021

### **REFRESHER COURSE**

S.No	Name	Month & Year
01	Softskills for professional Excellence	Nov 2015
02	Engineering & Technology(online)	Dec 2020

Date: 25-11-2022

Ananthapuramu.

Ankarao Mogili