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

Assistant Professor of EEE & Additional Controller of Examinations

Jawaharlal Nehru Technological University College of Engineering

Anantapur

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

Bio-data

Name	:	Ankarao Mogili
Official Address	:	Assistant Professor of EEE Additional Controller of Examinations Jawaharlal Nehru Technological University College of Engineering, Ananthapuramu – 515 002, Andhra Pradesh (India) Mobile : 091-9491694858
Residential Address	:	H.No: G4, JNTUA Teaching Staff Quarters(A1 type) Beside VC Guest House, JNTUA(Old Campus) Ananthapuramu – 515 001 Andhra Pradesh (India)
E-mail	:	ankaraomogili@gmail.com

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 Engineering, Anantapur	Assistant Professor (Selection Grade) Department of EEE	2021 - till date
2	JNTUA College of Engineering, Anantapur	Assistant Professor (Senior Scale) Department of EEE	2016 - 2021
3	JNTUA College of Engineering, Anantapur	Assistant Professor Department of EEE	2011 – 2016

Administrative Experience :

S.No.	Administrative Post held	Duration
1.	Additional Controller of Examination JNTUA , Anantapur	2024-Till date
2.	NSS Coordinator, JNTUA College of Engineering, Anantapur	2022-2024
3.	Officer incharge of Academic Section in JNTUA College of Engineering, Anantapur	2021-2022
4.	Public Relations Officer(PRO) in JNTUA Anantapur	2016 -2019
5.	Deputy Warden for Lepakshi Hostel, JNTUA College of Engineering, Anantapur	2015 -2016
6.	Head of Electrical & Electronics Engineering Department, JNTUA College of Engineering, Kalikiri	2014-2015
7.	Officer incharge of hostels,JNTUA College of Engineering, Kalikiri	2014-2015
	EC member for JNTUA College of Engineering, Anantapur	2011-2013
	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 as Coordinator of FDP Five Day Faculty Development Programme on "Design and Development of Power Converters for Electric Vehicles" 11-09-2023 to 15-09-2023, Department of EEE, JNTUA College of Engineering, Anantapur.
- Organized two day National level student symposium on "Electrify your Education" (EYE2K23) on March 28th 2023 at JNTUA Electrical Dept.
- Organized two day National level student symposium on "Electrify your Education" (EYE2K13) on March 14th 2013 at JNTUA Electrical Dept.
- Organized one day National level student symposium on "Electrify your Education" (EYE2K12) on March 14th 2012 at JNTUA Electrical Dept.

Teaching Experience: **13**+ years of teaching UG & PG Courses

Subjects Taught:

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

❖ 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) Details of Ph.Ds' awarded under my Supervision:

S.No	Title of the thesis	Name of the Student	Month of Award
1	Analysis of various control strategies for power quality enhancement in a micro grid	V. Sowmya Sree	July .2024

Ph.d students under my supervision: 04

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 58 M. Tech dissertations.

B.Tech Level … Guided more than 13 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	:	52
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	IJRET, Vol. 4, No. 7,	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	IJAREEIE, Vol. 4, No. 7,	July, 2015
6	Estimation of rotor	IJAREEIE, Vol. 4, No. 7,	July, 2015

	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

17	Open Ended Winding Motor Drive Using A Floating Bridge Multi-Level Converter	IJSRST,Vol.4,No.2	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

	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	Speed Estimation Of MRAS Based Induction Motor Drive Utilizing Machine's D- And Q-Circuit Impedances Using PI And ANFIS Controller	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	Design Engineering(Scopus), Issue.7	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	Design Engineering(Scopus), Issue.8	NOV,2021
36	Single Stage Autonomous Solar Water Pumping System Using PI and Fuzzy Controllers	Design Engineering(Scopus), Issue.7	NOV,2021
37	Implementation Of Wind Turbine System Using Fuzzy Controlled Based Induction Motor Drive	Design Engineering(Scopus),Issue.7	NOV,2021
38	Control of Low Voltage Ride through for PMSG Wind Turbines and Energy Storage Systems using ANFIS Controller	Design Engineering(Scopus),Issue.9	NOV,2021
39	GWO Based MPPT Technique for Standalone PV System	Design Engineering(Scopus),Issue.8	NOV,2021
40	Implementation of Fuzzy Logic Controller for Power Conversion Through a PV-Battery Based Multi-Bus Power Router system	International Research Journal of Engineering and Technology (IRJET) Volume:10, Issue: 01	JAN,2023
41	Design and implementation of Fuzzy Logic based Multilevel Inverter for Micro Grids considering Bidirectional Power flow through the interlinking converters	International Research Journal of Engineering and Technology (IRJET) Volume:10, Issue: 01	Jan-2023
42	Adaptive MPPT for a Partially and Uniformly Shaded PV System Using the Fuzzy logic based Jaya DE Algorithm in Unstable Atmospheric Conditions	Juni Khyat ISSN: 2278-4632 UGC Care Group I Listed Journal) Vol-13, Issue-02, No.01	Feb 2023
43	A Combination of PI&FUZZY Logic Based Improved P&O MPPT Technique for Partial Shading conditions	Juni Khyat ISSN: 2278-4632 UGC Care Group I Listed Journal) Vol-13, Issue-02, No.01	Feb 2023
44	FLC Based Adaptive Identification Of Rotor Time Constant For Speed-Sensorless Induction Motor Drives	IJCSPUB Volume- 13,Issue-02	June 2023

45	Power quality enhancement of solar- wind grid connected system employing genetic-based ANFIS controller	Paladyn, Journal of Behavioral Robotics	June 2023
46	Fuzzy logic controller for grid connected wind-PV Hybrid power generation for Islanded and seamless mode	International journalof current science (IJCSPUB) Volume-13,Issue- 02	June 2023
47	A New Delta(s) MRAS Method with FuzzyLogic Controller for Induction Motor Speed Estimation.	International journalof current science (IJCSPUB) Volume	July 2023
48	Fuzzy Logic Controller Based Finite Control set model predictive Torque Control For Induction Drives.	International journalof current science (IJCSPUB) Volume	July 2023
49	Design and Simulation of Fuzzy Logic Controller Based Extended Kalman Filter Observer with Improved Speed Estimation For Sensorless control.	International journalof current science (IJCSPUB) Volume	July 2023
50	Improved Dual mode Operation of Wind-solar with Energy Storage-Based Micro grid Integrated to Utility Grid by using ANFIS controller	International journal of current science (IJCSPUB) Volume-13,Issue- 04	Oct 2023
51	Sliding Mode Controller with Estimator for Disturbance Fuzzy Logic Controller fed PMSM Drive s	International Conference on Recent Trends in Electronics and Communication (ICRTEC)	Nov 2023
52	Model Predictive controller and Multilevel Inverter Design for grid voltage Unbalanced Resilience Model in Brushless Doubly-Fed Induction Generator Based wind Turbines	Journal of systems Engineering and Electronics (ISSN NO: 1671-1793) VOLUME 34, ISSUE 7	Jan 2024

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 Rotor Flux Based MRAS forInduction Motor Drives Employing PI and FuzzyController	ICPEICES	2018
4	Implementation of Fuzzy based Second order Sliding mode Observer fed Induction motor drive for Disturbance Rejection analysis		2019
5	Reduction of Effective Disturbance in Six- Phase Induction Machine employing Field Oriented control Strategy		2019
6	Predictive control of AFE Rectifier using Fuzzy Controller	ICAPHMA	2021
7	Sensorless predictive control of AFE Rectifier using fuzzy controller with robust adaptive Inductance estimation		Jan 2021

WORKSHOP ATTENDED

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

9	Awareness on IT/ITES job roles and Big data analytics	Aug,2015
10	Leveraging the power of Networking to unlock the potential of Entrepreneurship	Sep,2016
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 organizations	Aug,2018
16	Prospective Energy Sources-Wind &Solar PV systems	March,2018
17	Big data applications in Power systems	Sep,2018
18	Pedagogical Skills for outcome based education	Nov,2018
19	Experimental approaches & Instrumental aspects in Analytical Chemistry	Feb,2019
20	Intelligent Optimization techniques for Engineering problems	Aug,2019
21	Power Electronics for Power Engineers	Oct,2019
22	Electro Ceramics	Sep,2019
23	Materials for Energy conversion & storage devices	Dec,2019
24	Waste Management	Nov,2019
25	NAAC Awareness program	Jan,2020
26	Power Electronics, Control and Machines for Microgrid System	Dec, 2019
27	Advanced Signal Processing Techniques in Imagng, Radar & 5G Communication Networks	Dec, 2019
28	Circuits and systems with Emerging Sub-Micron Technology	Dec, 2019
29	National Education Policy 2020-Perspective	Feb-2021
30	Recent Trends in Smart Grid	Oct-2019
31	Research Challenges in Electrical Power and Energy	May-2021
32	Integration of Renewable Enenrgy & EV to Microgrid prospects and challenges	Feb-2022
33	Social applications of block chain technology and cyber physical systems	July-2023

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
13	Intellectual property rights	June-2021
14	Emerging technologies in generation, operation and control of electrical systems	June-2022
15	Power Electronics Converters' Applications in Microgrid and Vehicular Technology	July-2022
16	Machine Learning in Big Data Analytics	Feb-2023
17	Research Methodology - Methods & Best Practices	May-2023
18	Entrepreneurship Development	June-2023

REFRESHER/STTP COURSE

S.No	Name	Month & Year
01	Softskills for professional Excellence	Nov 2015
02	Engineering & Technology(online)	Dec 2020
03	Recent Advancements in VLSI Modelling and IC Design	July 2023

Date: 27-03-2025

Ananthapuramu.

Ankarao Mogili