

FACULTY PROFILE

Personal Information:

Date of Birth 15 -05-1977
Present Address Associate Professor, Department of EEE,
 GVP College of Engineering for Women,
 Kommadi ,Visakhapatnam



Professional Experience:

	College	Designation	Duration		Date of Ratification	Exp. in yrs
			From	To		
1	GMRIT	Assistant professor	21-01-2002	01-12-2006	01-09-2003	05
2	GMRIT	Associate Professor	01-12- 2006	01-08-2017	12-06-2010	11
3	GMRIT	Professor	01-08- 2017	05-05-2018	-	01
4	GVPCEW	Associate Professor	09-05-2018	Till date	-	4.8

Educational Qualifications:

Degree	Branch/ Specialization	Institution	University	Year of Admission	Year of Passing	Class / Division	% of marks
SSC	Maths, physics ,social etc.	Douglas Memorial High School	Secondary School Education ,AP	1992	1993	First	80.6%
IPE	MPC	BKS cooperative Junior college ,Srikakulam	Board of Intermediate , AP	1993	1995	First	84.6%
B.Tech	Electrical & Electronics Engineering (EEE)	Bapatla Engineering college ,Bapatla	Nagarjuna University ,Guntur	1996	2000	First with Distinction	70.6%
M.Tech	Applied Electronics	College of Engineering, Guindy	Anna university ,Chennai	2000	2002	First	6.98/10 CGPA
Ph.D	Power Electronics & Drives	JNTU Kakinada	JNTU Kakinada	2010	2017	-	-

Publications in journals

S.No.	Title	Journal	ISSN / ISBN No.	Indexing
1	Simplified configuration with reduced part count and improved total harmonic distortion for DC-AC conversion	IET Renewable Power Generation	1752-1424	SCI &Scopus (IF:3.034)
2	A New Multi-Output DC-DC Converter for Electric Vehicle Application	IEEE Access Journal	2169-3536	SCI &Scopus (IF:3.476)
3	A Single-Input Dual-Output DC-DC converter for Powertrain of PEM Fuel Cell Vehicle (Accepted)	Journal of New Materials for Electrochemical Systems (JNMES)	1480-2422	SCI &Scopus
4	Derivative-free Square-root cubature Kalman filter for non-linear brushless DC motors (p. 419 – 429)	IET Electric Power Applications	1751-8660	SCI &Scopus (IF:1.865)
5	Experimental implementation of Flower Pollination Algorithm for speed controller of a BLDC motor	Ain Shams Engineering Journal (Elsevier publication)	2090-4479	SCI (IF:3.18) Scopus
6	A nonlinear load frequency controller for hydropower plants	International Journal of Ambient Energy (Elsevier publication)	2162-8246	SCI (2.326) Scopus
7	Design and implementation of a new inverter topology with reduced THD and part count	International Journal of System Assurance Engineering and Management (Springer Publication)	0976-4348	Scopus ESCI
8	Adaptive PID Fuzzy gain scheduling for performance enhancement of Brushless DC Motor using dSPACE DS1103	International Journal of Applied Engineering Research, Research India	0973-4562	Scopus

		Publications		
9	Yaw Control of Horizontal Axis Wind Turbine Using LVDT Module	International Journal of Applied Engineering Research India Publications	0973-4562	Scopus
10	Salp Swarm Algorithm based Optimal Sensorless Speed Control of brushless DC Motor Drive for Electric Vehicle	International Journal of Power Electronics and Drive Systems (IJPEDS)	2722-256X	Scopus (IF:3.1)
11	Implementation of Harris Hawks Optimization (HHO) for load frequency controller of a hydropower plant	International Journal of Power Electronics and Drive Systems (IJPEDS)	2722-256X	Scopus (IF:3.1)
12	A DC-DC converter for low power applications using Arduino Uno Microcontroller	International Journal of Pure and Applied Mathematics	1311-8080	Scopus (IF:0.25)
13	The transition to LED Illumination: A case study on energy conservation	Journal of Theoretical & Applied Information Technology(JATI T)	1992-8645	Scopus
14	Design and implementation methodology for rapid control prototyping of closed loop speed control for BLDC motor	Journal of Electrical Systems and Information Technology. (Elsevier publication)	2314-7172	DOAJ Peer reviewed
15	Simulation Approach for Torque Ripple Minimization of BLDC Motor Using Direct Torque Control	International Journal of Advanced Research in Electrical, Electronics and Instrumentation	2320-3765	Peer reviewed (5.625)

		Engineering		
16	Optimal Tuning of PID Controller for a Linear Brushless DC Motor using Particle Swarm Optimization Technique	International Journal of Engineering Research and Applications	2248-9622	Peer reviewed (5.179) DOAJ
17	Speed control of Four-Switch BLDC Motor Drive	International journal of Research and Reviews in Electrical and Computer Engineering	2320 –3765	Peer reviewed
18	Microcontroller based control of three phase BLDC motor	Journal of Engineering Research and Studies	0976-7916	Peer reviewed
19	Open loop speed control of brushless dc motor using Low cost arduino UNO processor	i-manager's Journal on Electrical Engineering	0973-8835	ICI ,Peer reviewed
20	Sliding mode observer and controller for Performance improvement of Brushless DC Motor	International Journal of Engineering and Technology (IJET)	2319-8613	Peer reviewed
21	Implementation of grasshopper optimization algorithm for closed loop speed control a BLDC motor drive	International Journal of Swarm Intelligence	2049-405X	Peer reviewed
22	Adaptive Sliding Mode Control of PUMA 560 Robotic ARM	International Journal of Engineering Research & Technology	2278-0181	Peer reviewed

Conference publications: 16

S.No.	Paper title	Conference name	Month & Year
1	Control of Induction motor by adaptive input-output Linearization	National conference NADCON-09. GRIT, Hyderabad	26 th -27 th November, 2009
2	Design of Low cost & Energy efficient Solar Power based illumination System for remote villages	International Conference ICRAES-10, KSR college of Engineering, Tiruchengode, Tamilnadu	8 th - 9 th ,January 2010
3	Direct torque control of induction motor	National Conference NCP SOEM-2011, Bhubaneswar, and Orissa.	15 th -16 th May, 2011
4	Harmonic Reduction in PWM type AC chopper using genetic algorithm	National Conference NCEPES-2010, Siksha O Anusandhan University , Bhubaneswar, Orissa	1 st - 2 nd ,October 2010
5	Flux and speed estimation of decoupled induction motor	National Conference NCP SOEM-2011, Bhubaneswar, Orissa	15th-16th, May 2011 at
6	Sensorless Control of Brushless DC Motor Using Adaptive Neuro Fuzzy Inference Algorithm	IEEE Conference ICEAS-2011 at Bhubaneswar, Orissa	28 th – 29 th ,December 2011
7	Simulation studies on MRAC technique for vector controlled PMSM drive	Swarnadhra College of Engineering & Technology, Vishakhapatnam	8 th -10 th , July 2011
8	Torque ripple reduction technique for Four switch for BLDC motor”,	International Conference ICAEEEE-2012, organized by Institute for Research and Development India ,Bangalore	2 nd ,Sep2012
9	Parameter Estimation and speed control of BLDC Motor,	National Conference on Electrical Power & Energy Systems (EPES-2015)GVP College of Engineering, Visakhapatnam	8 th & 9 th May, 2015
10	Self-tuning of PID controller for speed control of BLDC Motor using Fuzzy gain scheduling	SERB, DST- New Delhi Sponsored Two day National Conference on “Recent Trends in Power Electronics & Drives”, organized by AITAM , Tekkali, AP.	18 th & 19 th March, 2016
11	Open loop Speed control of BLDC Motor with dSPACE DS1103,	Springer International Conference on Soft	April 8th -9th ,2016

	organized by RL Jalappa Institute of Technology, Bangalore	Computing, Intelligent Systems and Applications	
12	Design of a Front End DC-DC Converter for a Permanent Magnet DC motor Using Fuzzy Gain Scheduling ,	IEEE International Conference on Power, Control, Signals & Instrumentation Engineering (ICPCSI) organized by Saveetha Engineering College ,Chennai.	21 st -22 nd September, 2017,
13	Implementation of grasshopper optimization algorithm for controlling a bldc motor drive	Springer international conference on Soft Computing in Data Analytics (SCDA) organized by Sivani Engineering College, Srikakulam, Andhra Pradesh.	10 th -11 th March ,2018,
14	Adaptive sliding mode controller design for a Single input – Multiple output (SIMO) DC–DC converter in Electric Vehicle Application”,	Springer International Conference on Systems, Control and Computing (AISCC-2020) held at MNIT Jaipur	27 th -28 th Feb, 2020.
15	Control of Four Tank System using Grasshopper Algorithm,	IEEE India Council International Subsections Conference (INDISCON), 2020,GVP college of Engineering , Visakhapatnam	2020
16	A New Configuration of Switch and Source Fault-Tolerant Dual-Input Single-Output DC-DC Converter	2021 IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON)	24 th Sep,2021

Book Chapters:

Chapter	Book Title	Publisher
Adaptive PID Fuzzy gain scheduling for performance enhancement of Brushless DC Motor using dSPACE DS1103	Advanced Engineering Research and Applications (AERA	Research India publications, May 2019
Grey Wolf Optimization-Based Improved Closed-Loop Speed Control for a BLDC Motor Drive	Smart Innovation, Systems and Technologies	Springer, vol. 104. https://doi.org/10.1007/978-981-13-1921-1_14 ISBN:978-981-13-1921-1
Implementation of Grasshopper Optimization Algorithm for Controlling a BLDC Motor Drive	Soft Computing in Data Analytics. Advances in Intelligent Systems and Computing,	Springer, vol 758 https://doi.org/10.1007/978-981-13-0514-6_37 ISBN: 978-981-13-0514-6

Patents Filed:

Patent application titled "A CIRCUIT AND A METHOD FOR DIRECT CURRENT- DIRECT CURRENT (DC-DC) CONVERSION" bearing application no. 202041046063 has been published in the Journal Number 46/2020

Workshops Organized:

S. No.	Workshop/FDP	Date	Responsibility
1	A Two day workshop on MPPT techniques	12 th -13 th , March 2020	Co-Convener
2	A Five day online FDP on Applications of Optimization Techniques To Electrical Engineering	22 nd -26 th June ,2020	Convener
3	Webinar on Power Converter Topologies in Renewable Energy Sources	6 th June,2020	Coordinator

Add on courses / Gate classes handled:

S. No.	Subject /Topic	Year
1	Power Electronics & Drives	III & IV EEE
2	MATLAB/Simulink	III EEE

Additional Responsibilities:

S. No.	Nature of Role	Period
1	Chief coordinator IIPC (Industry Institute Partnership Cell)	2018-till date
2	NBA coordinator	2018-till date
3	Member NAAC C6 committee	2020-till date
4	Convener Anti ragging committee	2020-till date

- As IIPC coordinator involved with principal & vice-principal in making MoU with different organizations for internship, placements, training and industrial visits.
- As NBA coordinator, mentored criteria 5 and formulated the procedures and documents related to NBA in the institution/department.
- As NAAC C6 member, developed teaching & non-teaching appraisal formats together with the vice-principal and principal.
- As a convener of Anti Ragging committee, scheduling the visits, monitoring and creating awareness among the students.

Memberships in professional bodies:

Name of the Body	Membership No.	Period of Validity
Member IEEE	93881566	One year 2019
Life member ISTE	LN4760	Life member
Associate life member IE (I)	AM097455-5	Life member

MOOCS courses completed:

S. No.	COURSE	duration	Grade	Organization /Professor
1	Design of Photo Voltaic Systems	12 weeks	Elite	NPTEL FDP Prof.L. Umanand IISc, Bangalore
2	DC Microgrid	8 weeks	Elite	NPTEL FDP by Dr. Avik Bhattacharya IIT ,Roorkee
3	Programing for Everybody (Getting Started with Python)	15 days	Successfully completed	Non-credit course offered through Coursera by University of Michigan Prof. Charles Severance School of Information, University of Michigan (https://www.coursera.org/in)
4	AI For Everyone	15 Days	Successfully completed	Non-credit course offered through Coursera by Andrew Ng Adjunct Professor Computer Science Department Stanford University (https://www.coursera.org/in)

Guiding Research Scholar for Ph.D as:

S. No	Name	University	Category	Supervisor/ Co-supervisor	Date admission
1	Mr. Ramu Assistant Professor ,GVPCEW	JNTU Kakinada	Part-time	Supervisor	15-02-2019
2	Mr.SaiKumar P Assistant Professor ,GVPCE (A)	NIT Meghalaya	Part-time	Co-supervisor And main supervisor Dr. Piyush Pratap Singh ,NIT Meghalaya	05-10-2020

Grants received/applied:

S. No.	Name	Sponsored Agency	Amount	Status
1	AICTE –ISTE one week refresher course on E-Mobility & battery charging	AICTE-ISTE	93,000	Received the grant as coordinator
2	Multi phase BLDC motor control for Electric vehicle application	SERB-CRC	18,00,000	Rejected in final stage

Involvement in Industrial Consultancy Projects:

Actively collaborated as a co-investigator with Prof. (Dr). Sastry V.Vedula, Senior Professor, GVPCE (A) in an industrial consultancy project sponsored by HBL power systems.

The funding was received by GVPCE (A) as Prof. Sastry V.Vedula is the Project coordinator making use of the facilities at GVPCE and the graduate students of GVPCE who worked with as Sastry V.Vedula in project titled,” Modeling & Simulation of the SRM (Switched Reluctance Motor) drive for EV (Electric Vehicle) application”.

Dr. P.Devendra