




ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY

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

Accredited by NAAC & An ISO 9001:2015 Certified Institution

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FACULTY PROFILE

Name of the Faculty	Dr. AJAY KUMAR M		
Designation	Associate Professor		
Department	EEE	Date of Birth 22/07/1982	
Date of Joining the Institution	13-08-2019	Native place Vijayawada, AP, India	
Academic Qualification with Class/Grade	<ul style="list-style-type: none"> • Ph.D from NIT Warangal in 2015. • M.Tech - First Class with Distinction from NIT Warangal in 2010. • B.Tech- First Class from JNTUH in 2004. 		
Professional Qualification	<ul style="list-style-type: none"> • Certified as a ProAct Digital Teacher by Loyola Institute of Business Management- (LIBA) June 2020. • Certified as a NITTR- mentor by AICTE. 		
Employee ID	ALIET-19-07		
E-mail	ajaykumar@aliet.ac.in		
Total Experience in Years	Teaching: 13 years	Industry	Research : 04
Papers Published in Journals -	Scopus Indexed – 9	Articles in Books: 0	
Faculty Development Programmes attended:	34	Guest Lectures Delivered: 03	
Papers presented in Conferences/ attended	National: 2	International: 08	
Are you a PhD Guide? If Yes, Give field & University	YES	GIET UNIVERSITY, GUNUPUR	
PhDs / Projects Guided	PhDs : 00 MPhil -00	Projects at PG Level : 02 Projects at UG Level: - 34	

Books Published/IPRs/Patents	1
Professional Memberships	MIE India, MIAEng
Editorial Board Membership	American journal of power engineering
Google Scholar Index	Google citations: 54 H- Index-5 i10-index-1
Foreign Projects	1
National Project	NIL
Grants fetched	NIL
Conferences/ Seminars / Workshops / FDP Organised @ ALIET	<ul style="list-style-type: none"> • Organized one week National Level Online FDP on “Cutting Edge Technologies for Electrical Engineering” from 18-22 May 2020. • Organised a Three day Online FDP on “Driving Technologies for Electrical Systems” from 29th June to 1st July 2021. • Organized one week National Level Online FDP on “MATLAB-ARTIFICIAL INTELLIGENCE AND OPTIMIZATION TECHNIQUES” from 21st – 25th November 2022. • Organized one week National Level Online FDP on “ANSYS-EM for Electrical Engineering Application” from 17th – 21st July 2023.
Any Other Achievements	❖ Certified AICTE Mentor for Technical Teachers
Awards if any	Academic Excellence award by Institute of Engineers INDIA
Other Responsibilities	<ul style="list-style-type: none"> • DAC member for EEE department • NBA coordinator for EEE department • Research Team member • Editor for the Dept. newsletter
Whether Ratified by University (Yes/No)	NO
Faculty Development Programmes attended: <ol style="list-style-type: none"> 1. “A Five Day Faculty Development Programme on Arduino Training”, organized by POTTI SRIRAMULU CHALAVADI MALLIKARJUNA RAO COLLEGE OF ENGINEERING & TECHNOLOGY, Vijayawada, during 29/04/2020-03/05/2020. 2. “Renewable Technologies Integrated to AC Power Grid”, organized by Sri Sairam Institute of Technology, Chennai, during 28/05/2020 to 1/06/2020. 3. “Technological Advances in Power Switching Converters for Renewable Energy Sources” organized by Bapatla Engineering College, Guntur, AP, during 01/05/2020 to 05/05/2020. 	

4. Attended an Online orientation training programme for mentors during 30th November to 4th December 2020, organised by AICTE, New Delhi.
5. Three Day National level workshop on Electric Vehicle Design using MATLAB , organised by Electrical Engineering Student association, G. H. Raison Institute of Engineering and Technology, Pune, during Dec 7-9,2020.
6. AICTE recognized Short Term Training Program on “Application of Advanced Techniques to Control Microgrid (AATCM-2021)” held during 6th APRIL to 11th APRIL-2021, organized by Department of Electrical and Electronics Engineering, AITAM, Tekkali.
7. AICTE recognized one week National Level Online FDP on “MATLAB-ARTIFICIAL INTELLIGENCE AND OPTIMIZATION TECHNIQUES” from 21st – 25th November 2022 at ALIET.
8. APSSDC recognized 30 days master class on “Electric vehicle Design” organized by Pantech E-Learning Pvt.Ltd, chennai, during 20-06-2022 to 19-07-2022.
9. AICTE recognized one week National Level Online FDP on “ANSYS-EM for Electrical Engineering Application” from 17th – 21st July 2023 at ALIET.

Post-Doctoral Publication / Seminars/Workshops/Guest Lectures:

1. **M. Ajay kumar**, and N. V. Srikanth, “Transient Analysis of Super Conducting Fault Current Limiter Integrated With Multi- Terminal Direct Current System”, *Russian Electrical Engineering, Springer publications*, Vol.88, No.4, pp.239-246, 2017.
 2. Satyasis Mishra, **M. Ajay Kumar**, T Gopi Krishna and Tadesse Hailu, “ Detection and Enhancement of Brain tumor from MRI using Water Cycle Algorithm and Relevance Vector Machine learning Approach” in proceedings of 3rd International Research Symposium, during May 9-11,2019, Adama University, Adama, Ethiopia.
 3. **M. Ajay Kumar**, “ VSC HVDC Transmission” , Lap Lambert Academic publishing, ISBN: 978-620-3-58132-4, March 2021.
1. Guest Lecture on “ Artificial Intelligent Techniques in Power Systems” in Sreenidhi Engineering College, Hyderabad.
 2. Resource person for the “International Faculty Development Programme” on “Empowering

Teacher Education and Technology” Jointly Organized by GDC Darhal, UT of J&K and Cape Comorin Trust, India from 22-28th February 2021.

List of Publications in Journals

- 1) **M. Ajay kumar**, and N. V. Srikanth, “Transient Analysis of Super Conducting Fault Current Limiter Integrated With Multi- Terminal Direct Current System”, *Russian Electrical Engineering, Springer publications*, Vol.88, No.4, pp.239-246, 2017.
- 2) **M. Ajay Kumar**, and N.V.Srikanth, “An Adaptive Coordinated Control for an Offshore Wind Farm Connected VSC Based Multi-Terminal DC Transmission System" *Open Engineering*, Vol.5. No.1, pp.6-17, 2015.
- 3) **M. Ajay Kumar**, and N.V.Srikanth, “Negative sequence current controlled grid integrated wind farm connected to ANFIS based HVDC Light transmission system", *Russian Electrical Engineering, Springer Publications*, Vol.85. No.12, pp.800-808, 2014.
- 4) **M. Ajay kumar**, and N. V. Srikanth, “Modelling and simulation of SVPWM based vector controlled HVDC Light systems,” *Leonardo Electronic Journal of Practices and Technologies*, Vol. 11, No.2, pp. 23-36, December 2012.
- 5) **M. Ajay kumar**, and N. V. Srikanth, “HVDC Light Systems: An overview,” *International Review on Modelling and Simulations (IREMOS)*, Vol. 5, No. 5, pp.1951-1959, 2013.
- 6) **M. Ajay kumar**, and N. V. Srikanth, “An adaptive neuro fuzzy inference system-controlled space vector pulse width modulation based HVDC light transmission system under AC fault conditions”, *Central European Journal of Engineering, Springer publications*, vol. 41), pp.27-38, March. 2014.
- 7) **M. Ajay kumar**, and N. V. Srikanth, “Performance analysis of Fuzzy logic based Vector Controlled HVDC Light Transmission System,” *Journal of Electrical Engineering, Romania*. Vol.14. no.3.pp.1-7, September 2014.
- 8) **Ajay kumar Moodadla**, and Nitheesh kumar M, “ Design and analysis of wind power plant screen using SCADA”, *Journal of chengdu university of Technology*, vol.26, issue. 8, March 2021.

List of Conferences

1. **M. Ajay kumar**, and N. V. Srikanth, “Performance of SVPWM Based Vector Controlled HVDC Light Transmission System Under Balanced Fault Condition”, in proceedings of IEEE Power and Energy Conference at Illinois(PECI), USA, Feb 2013, pp.194-199.
2. **M. Ajay kumar**, K U.Archana, D. Hari Krishna, and N.V.Srikanth, “Transient stability assessment of a multi machine power system,” in proceedings of RITS International conference on advancements in Engineering and Management, Hyderabad, Feb 28th -29th , 2012, pp.102-108.
3. **M. Ajay kumar**, and N. V. Srikanth, “A Comparative study of SPWM and SVPWM controlled HVDC Light systems”, in proceedings of IEEE International conference on Power, Energy & Control

(ICPEC), Chennai, India, Feb 6th -8th , 2013, pp.591-595.

4. **M. Ajay kumar**, and N. V. Srikanth, “Dynamic Performance of an adaptive neuro fuzzy inference system based vector controlled HVDC Light transmission system”, in proceedings of Fifth International Conference on Power and Energy Systems (ICPS), Kathmandu, Nepal, Oct 28th -30th , 2013, pp.1-6.

5. **M. Ajay kumar**, and N. V. Srikanth, “Dynamic Performance of a Fuzzy PI Controlled SVPWM Based HVDC Light Transmission System”, in proceedings of IEEE India conference (INDICON 2013) at IIT Bombay, 13th -15th Dec 2013, pp.1-5.

6. **M. Ajay kumar**, K. U. Archana, and N. V. Srikanth, “Fast Fault Recovery of a Grid Integrated Wind Farm Based HVDC Light Transmission System”, in proceedings of IEEE Innovative Smart Grid Technologies ASIA-2014, Kuala Lumpur, Malaysia, 20th -23rd May, 2014, pp.453-458.

7. **M. Ajay kumar**, B. Vijay kumar, and N. V. Srikanth, “ANFIS Based Coordinated Control of an Offshore Wind Farm Connected VSC MTDC System”, in proceedings of IEEE 18th National Power System Conference (NPSC)-2014, IIT Guwahati, 18th – 20th December 2014.

8. B. Vijay kumar, **M. Ajay kumar**, and N. V. Srikanth, and Y. Chandra Sekhar, “Optimization of UPFC Location and Capacity to Improve the Stability using ABC and GSA Algorithm”, in proceedings of 6th annual IEEE Power and Energy Conference at Illinois (PECI) 2015, USA, 20-21st February 2015.

9. Satyasis Mishra, **M. Ajay Kumar**, T Gopi Krishna and Tadesse Hailu, “ Detection and Enhancement of Brain tumor from MRI using Water Cycle Algorithm and Relevance Vector Machine learning Approach” in proceedings of 3rd International Research Symposium, during May 9-11,2019, Adama University, Adama, Ethiopia.

10. **M. Ajay Kumar**, Mr MANIDEEP NALLAMOTHU presented a paper titled “Simulation of Lithium-Ion battery based Electric Vehicle using Longitudinal Driver Control” in virtual international conference titled “Smart Grids:Paradigm of Cyber Physical Systems”-(SGPCPS-2023) organized by centre for smart grid technologies and school of electrical engineering from 9th to10th march 2023 at VIT,Chennai.

Citations & Index

✓ Citations= 128

✓ h-index = 5

✓ i10 index = 3