# CURRICULUM VITAE

# Dr. M.S.Priyadarshini

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### **OBJECTIVE**

To establish myself in the field of education by utilizing my teaching and experience to help students achieve high improvements in academics and to obtain a position that will enable me to use my strong organizational skills, effective teaching capability, educational background and ability to work well with people.

Qualification	Name of the Institution	Division	Year of passing	Specialization
Bachelor of Technology	J.N.T.U Anantapur College of Engineering, Ananthapuramu	First class	2002	Electrical and Electronics Engineering
Master of Technology	Jawaharlal Nehru Technological University, Hyderabad	First class with Distinction	2010	Electrical Power Engineering
Ph.D	J.N.T.U Anantapur, Ananthapuramu		2021	Electrical Engineering

### ACADEMIC QUALIFICATIONS:

# TEACHNG EXPERIENCE: 17 years

# JOURNAL PUBLICATIONS:

- 1. **M.S.Priyadarshini** and Dr.M.Sushama, "Simulation of the Step Response of Distributed Power-Flow Controller", in International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, P-ISSN: 0974-3588, Volume 8, Issue 2, pp.14-21, December 2014.
- 2. **M.S.Priyadarshini** and Dr.M.Sushama, "Performance Analysis of Three-Phase Three Wire Voltage Source Inverter Based Unified Power Quality Conditioner", in International Journal of Electrical, Electronics and Data Communication, (IJEEDC), ISSN: 2320-2084, Volume-3, Issue-2, pp. 15-19, February 2015.
- 3. **M.S.Priyadarshini** and Dr.M.Sushama, "Modeling of Power Quality Disturbances using Parametric Equations in MATLAB", in International Journal of Engineering Research in Electrical and Electronic Engineering (IJEREEE) Vol 1, Issue 8, ISSN (online): 2395-2717, pp.14-19, October 2015.
- 4. **M.S.Priyadarshini** and Dr.M.Sushama,"Multiresolution Analysis based Decomposition and Reconstruction of PQ Disturbances using Wavelet Transform", in

International Journal of Scientific & Engineering Research, Volume 7, Issue 3, ISSN 2229-5518, March-2016

- 5. **M.S.Priyadarshini** and Dr.M.Sushama, "Discrete Wavelet Transform based Selection of the Type of Entropy for Recognition of an Impulsive Transient", in International Journal of Inventions in Electronics and Electrical Engineering (IJIEEE) Vol 3, e-ISSN 2454-9592; P-ISSN: 2454-8081, pp. 23-32, 2017.
- 6. **M.S.Priyadarshini** and Dr.M.Sushama, "Selection of Mother Wavelet for processing of Power Quality Disturbance Signals using Energy for Wavelet Packet Decomposition", in International Journal of Pure and Applied Mathematics (IJPAM) Vol. 114, No.9, ISSN: 1314-3395, pp.313-321, 2017.
- 7. **M.S.Priyadarshini** and Dr.M.Sushama, "Discrete Wavelet Analysis based Processing of Short-Duration Voltage Variations", in International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7, Issue-6S, pp. 510-514, March 2019.
- 8. J.Prathyusha, **M.S.Priyadarshini** and Y.Nagaraja, "An Adaptive Power Control Of Microgrid Using Hydro-Wind-PV Based Energy Generation System", in the International journal of analytical and experimental modal analysis, ISSN 0886-9367, Volume XI, Issue VIII, pp. 1140-1146, August 2019.
- 9. A.Kartheek Kumar, **M.S.Priyadarshini** and Y.Nagaraja, "A Novel Approach of Current Source Converter based WECS in HVDC System", in the International journal of analytical and experimental modal analysis, ISSN 0886-9367, Volume XI, Issue IX, pp. 1115-1120, September 2019.
- M.Rafeeq, M.S.Priyadarshini and, Y.Nagaraja, "Conversion of DC to AC power in Single Stage and Energy Storage Topology by using high performance Z-Source Inverter", in Journal of Resource Management and Technology, ISSN 0745-6999, Volume 11, Issue 3, 2020.
- S.Afroz, M.S.Priyadarshini and, Y.Nagaraja, "Enhanced Power Control Method in DC Micro grid with Multi Level Converters", in Mukt Shabd Journal, ISSN 2347-3150, Volume IX, Issue IX, pp. 666-670, -September 2020.
- 12. **M.S.Priyadarshini** et al., "Significance of Harmonic Filters by Computation of Short-Time Fourier Transform-Based Time–Frequency Representation of Supply Voltage " in SCIE indexed Journal Energies, E-ISSN 1996-1073, Volume 16, Issue 5, February 2023.

### PAPERS PRESENTED IN CONFERENCES:

1. Presented a paper entitled "Optimal Power Oscillation Damping Using SSSC" in National Conference on Emerging Technologies in Electrical Engineering held during June 11<sup>th</sup>-12<sup>th</sup>, 2010 at Adam's Engineering College, Paloncha, Khammam.

2. Presented a paper entitled "Wavelet Based Protection Schemes for TEED Transmission Circuits" in the International Conference on Communication, Computation, Control and Nanotechnology held during October 29-30, 2010 at Rural Engineering College, Balki, Bidar (Dist), Karnataka.

3. Presented a paper entitled, "Classification of Short-Duration Voltage Variations using Wavelet Decomposition based Entropy Criteria", in IEEE International Conference on Wireless Communications, Signal Processing and Networking, organized by S.S.N College of Engineering, Chennai on 23 to 25<sup>th</sup> March, 2016.

4. Presented a paper entitled, "Continuous wavelet analysis based detection of voltage transient, sag, swell and interruption signals using MATLAB" in International Conference on Emerging Trends in Electrical Systems & Engineering, organized by

Malla Reddy Engineering College for Women, Secunderabad, Telangana, on 19<sup>th</sup> and 20<sup>th</sup> August 2016.

5. Presented a paper entitled, "Wavelet Transform based Statistical Feature Extraction of Power Quality Disturbances", in International Conference on Recent Advances in Computational techniques IC- RACT 2022 organized by Amity University, Mumbai on 10<sup>th</sup> and 11<sup>th</sup> March 2022. Paper is selected for AIP Conference Proceedings, indexed in the Conference Proceedings Citation Index (part of Web of Science) and Scopus and is in press.

### **BOOK CHAPTERS PUBLISHED:**

1. M.S.Priyadarshini and Dr.M.Sushama, "Performance of Static VAR Compensator for changes in voltage due to sag and swell", Innovations in Electrical and Electronics Engineering. Lecture Notes in Electrical Engineering, Vol 626, pp, 225-233, Springer, Singapore, Online ISBN 978-981-15-2256-7, March 2020.

# **MEMBERSHIP IN PROFESSIONAL BODIES:** Life Member in IEI, Member in IEEE WIE and IAENG

### **ONLINE CERTIFICATION COURSES:**

- 1. Completed an eight week NPTEL online course in "Electromagnetic Compatibility (EMC)", from IIT Madras in association with KTH Royal Institute of Technology, Sweden during February to April 2019.
- 2. Completed an online course in "Electric Power Systems", authorized by University at Buffalo and The State University of New York offered through Coursera during May 2020.
- 3. Completed an online course in "Wind Energy", authorized by Technical University of Denmark (DTU) offered through Coursera during June 2020.
- 4. Completed 12 week NPTEL online course and certified as Elite in "Problem Solving Through Programming in C", from IIT Kharagpur during July to October 2022.

### **INFORMATION ABOUT WORKSHOPS AND FDPS :**

- 1. Participated in national level workshop on "Wavelet Transform: Basic Theory and Practice" held during 24-25 April, 2015 in Manipal Institute of Technology, Manipal University, Manipal, Karnataka.
- Participated in national level workshop on "Signal Processing Applications using MATLAB" held on16<sup>th</sup> of September, 2015 in Karpagam College of Engineering, affiliated to Anna University, Coimbatore, Tamil Nadu.
- 3. Participated in ISTE approved short term training programme on,"Advances in MATLAB for engineering applications", from 30<sup>th</sup> May 2016 to 12<sup>th</sup> June 2016 in Annamalai University, Chidambaram, Tamil Nadu.
- 4. Participated in IEEE YP and IEEE PES sponsored workshop on "Research planning, paper writing and research tools" on 6<sup>th</sup> October 2017 in VIT University, Vellore, Tamil Nadu.
- 5. Participated in workshop on "Digital signal processing and control systems using MATLAB" on 17<sup>th</sup> March 2018 in VIT University, Vellore, Tamil Nadu.
- 6. Participated in two day in national level workshop on "Innovative techniques in Engineering and Management", on 22<sup>nd</sup> and 23<sup>rd</sup> March 2019 at K.LM College of Engineering for Women, Kadapa, A.P.

- Attended national webinar on "Deep Learning in Visual Recognition" on 2<sup>nd</sup> July 2020 organized by Sree Vidyanikethan Engineering College, Tirupati.
- 8. Organized webinar on "Nanotechnology for energy harvesting" on 14<sup>th</sup> July 2021 at A.I.T.S Kadapa, A.P.
- 9. Organized webinar on "National Intellectual Property Awareness Mission" in association with Rajiv Gandhi National Institute of Intellectual Property Management RGNIIPM, Nagour on 13<sup>th</sup> July 2022,
- 10. Attended webinar on "Writing Winning: Research Projects for Funding" on 23<sup>rd</sup> July 2022 organized by MP Birla Institute of Management, Bengaluru.
- 11. Attended one week online FDP on "Applications of Artificial Intelligence in Engineering" organized by NIT Warangal from 08.08.2022 to 17.08.2022.
- 12. Attended one week online FDP on "Amazon Web Services" organized by Brainovision Solutions India Pvt Ltd in collaboration with KSRMCE from 22.08.22 to 27.08.22.
- Attended in webinar on "Academic Outreach Program" conducted by Aeronautics Research & Development Board (AR & DB) of DRDO and Indian Institute of Technology (IIT) Tirupati on 7<sup>th</sup> Sep 2022.
- 14. Attended webinar on "Compact Solar Desalination and Cold Storage Systems" on 3<sup>rd</sup> Oct 2022 organized by IIT Madras, Chennai.

### **PATENTS PUBLISHED:**

Published an Indian patent on " An Artificial Intelligence based Virtual Surgery & Medical Procedure Assessment, Intervention System and method" with Application no. 202241053603 on 23.09.2022.

### SUBJECTS TAUGHT FOR UG LEVEL:

Basic Electrical Engineering, Electrical Circuits, Network Theory, Electrical Technology, Network Analysis, Electromagnetic Fields, Electromagnetic Theory and Transmission Lines, Control Systems Engineering, Modern Control Theory, Generation of Electric Power, Renewable Energy Sources, Switchgear and Protection, Electrical Distribution Systems, Power System Analysis, Power Electronics, Power Semiconductor Drives, Power Quality, HVDC Transmission, Electrical Measurements and Utilization of Electrical Energy.

### **SUBJECTS TAUGHT FOR PG LEVEL:**

Human values and Professional Ethics, Power System Stability and Control.

### CURRENT AREAS OF RESEARCH SPECIALIZATION:

- Power systems
- Signal processing and AI applications to Power Systems
- Power quality
- FACTS controllers

### **TECHNICAL SOFTWARE:**

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- PSPICE circuit simulation (Micro Sim Corp. USA)
- MATLAB and Associated tool boxes (Math Works Inc, USA)
- SEQUEL circuit simulation by IIT Bombay

I hereby declare that all the above details furnished are true to my knowledge.

(M.S.PRIYADARSHINI)