

Name **MR. JAYANT JAGANNATH MANE**
B-TECH, M-tech, PhD (pursuing)

Designation Assistant Professor

Department ELECTRICAL

Date of Joining the Institute 16/08/2006

Education Diploma in Electrical, 2001
B-Tech in Electrical, 2004
M-tech in Power Electronics and Drives, 2012

Branch / Specialization Power Electronics and Drives

Areas of Interest Electric vehicle, DC nano grid, Renewable energy, power converter design, simulation and implementation

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Academic Appointments

Name of the University / Institute / Industry	Duration	Designation
Finolex Academy of Management and Technology, Ratnagiri	16/08/06 to till date	Assistant Professor
Rajendra Mane Collage of Engg and Technology, Ambav, (Devrukh)	23/07/2005 to 17/08/2006	Lecturer
Rajaram Shinde Collage of Engineering, Pedhambe. (Chiplun)	16/01/2005 to 22/07/2005	Lecturer
Dr.Babasaheb Ambedkar Technological University, Lonere, Raigad	02/08/2004 to 30/12/2004	Lecturer

Total Experience – 14 Years

Patent Filled

"Systems for regenerative braking with remote monitoring" A complete patent (application No. 201721015232) filled at Indian Patent Office on 28th April 2017 as an Inventor and Applicant. Current Status: Published and Applied for examination

Books Written

1. "Mechatronics", Aksharlen Publications, Solapur (ISBN 81-903788- 2-1)
2. "Video encoding with authentication using Multiwavelet Transform", Lambert academic publishing, Germany (ISBN 978-3-330-07343-2)

Research Project

As a co-investigator, Grant of Rs. 16000 sanctioned by University of Mumbai under the Minor Research project scheme 2017-18, for the project titled "An intelligent, adjustable, automatic timer system"

Papers Reviewed - 03

1. One paper for 7th International Conference on Power Systems 2017, held in December at COEP, Pune. (through easychair.org)
2. Two papers for National Conference on Sustainable Energy 2018, held in February at Visvesvaraya National Institute of Technology (VNIT), Nagpur. (through easychair.org)

Students projects Recently Guided at Undergraduate Level

1. Regenerative braking of BLDC motor
2. Design and development of converters and loads for DC Nano grid
3. Fuzzy controlled Solar Inverter AC (Winner in Avishkar2017 College level round)
4. Solar Pump using BLDC motor with MPPT (Runner-up in Departmental Project Competition)
5. Electronic Differential for Electric Vehicle
6. Field Oriented controlled (FOC) Electric-bike

Seminars Delivered/Expert Lecture/Invited Talks/Workshops Conducted

1. Conducted workshop on "PCB design and circuit making" at Dr. BATU, Lonere, 7th -8th April 2018
2. Conducted workshop on "PCB design and circuit making" at VIRTUOSIC 2018 SSPM's college of engineering, 13th -14rd March 2018
3. Delivered a guest lecture on "Vector Control and implementation" at N. K. Orchid college of engineering and technology, Solapur, 26th September 2017
4. Conducted workshop on "PCB design and circuit making for T E Electrical" at Finolex Academy of engineering and technology, Ratnagiri 9th-10th September 2017

5. Conducted workshop on "PCB design and circuit making for SE Electrical" at Finolex Academy of engineering and technology, Ratnagiri, 16th – 17th September 2017
6. Conducted a bridge course on "Prerequisites of power electronics", at Finolex Academy of engineering and technology, Ratnagiri 8th July 2017
7. Conducted workshop on "PCB design and circuit making" at VIRTUOSIC 2017 SSPM's college of engineering, 22nd -23rd March 2017
8. Conducted workshop on "Programming with Arduino" at Government Polytechnic, Malvan, 3rd – 4th March 2017
9. Conducted workshop on "Advanced MATLAB in power electronics" at N. K. Orchid college of engineering and technology, Solapur, 18th Feb 2017
10. Conducted workshop on "BLDC motor and its control", on 6th April 2016 at FAMT Ratnagiri
11. Conducted workshop on "DC motors", on 11th March 2016 at VIRTUOSIC 2016 SSPM's college of engineering
12. Conducted workshop on "PCB Design and circuit making on 10th March 2016 at VIRTUOSIC 2015 SSPM's college of engineering
13. Conducted workshop on "DC and Special purpose motors" on 26th February 2015 at VIRTUOSIC 2015 SSPM's college of engineering
14. Delivered a lecture during work shop on "ROBOTICS" under ISTE student chapter on "Introduction to Industrial Robots" at RMCET, Ambav

Papers Published

Papers Presented/Published in National / International Journals - 05

1. Amol R. Sutar, G. G. Bhide, J. J. Mane "Implementation and Study of BLDC Motor Drive System", International Journal of Engineering Science and Research Technology (IJESRT) 5(5), pages 57-64. May 2016
2. Jayant J. Mane, Uday V. Patil, Milind N. Tagare and Bhooshan A. Rajpathak, "Observation of Bifurcations in Current Controlled Boost Converter" Asian Journal of Convergence in Technology, Vol II, Issue III, ISSN 2350-1146, I. F.-2.71. May 2017
3. Vaibhav A. Sansare, Milind N. Tagare, Jayant J. Mane and Nitin V. Kelkar, "Design of Solar Battery Charger with voltage controlled Buck Converter", Asian Journal of Convergence in Technology, Vol II, Issue III, ISSN 2350-1146, I. F.-2.71. May 2017
4. Jayant J. Mane, Sanjay S. Swami, Amit S. Pawaskar and Uday V. Patil, "Electronic Differential for Electric Vehical with FOC controlled Two Wheel Drives", Asian Journal of Convergence in Technology, Vol II, Issue III, ISSN 2350-1146, I. F.-2.71. May 2017
5. Vaibhav A. Sansare, Nikhil N. Kasar, Jayant J. Mane and Asha Gaikwad, "Development of Solar PV Battery Charger with Buck Converter", International Journal of Engineering Science and Research Technology ISSN 2277-9655, June 2016

International Conferences – 03

1. Mr. N. N. Kasar, Mr. V. A. Sansare, Mr. J. J. Mane, "Hardware Implementation of Isolated Multioutput DC-DC power supply with fixed and programmable voltage levels", Conference Proceedings on Electrical, Electronics, Communication, Mechanical and Computer (EECCMC) Jan 2018, ISSN 978-1-5386-4303-7
2. Jayant J. Mane, Shubhada Mulye and Mohan V. Aware. "Performance of 5-level NPC inverter with Multi-Multicarrier Multi-Modulation technique." Conference proc. PEDES 2012 (Power Electronics, Drives and Energy Systems), CPRI and IISC Bengaluru, Dec. 2012 of Mumbai.
3. Jayant J. Mane and Mohan V. Aware, Member, IEEE. "Multilevel Grid-Connected Inverter Performance Under Different Modulation Strategies". conference proc. ICUE 2011 (International Conference and Utility Exhibition), Pattya, Thailand, Sept. 2011

National Conferences – 06

1. Jayant Mane, Bhooshan Rajpathak and Vadirajacharya K "Observation of Bifurcations one dimensional liner piecewise smooth discontinuous maps with negative slopes", National Conference on Sustainable Energy (NCOSE 2018), 22nd – 23rd Feb, 2018
2. Jayant J. Mane, Uday V. Patil, Milind N. Tagare and Bhooshan A. Rajpathak, "Observation of Bifurcations in Current Controlled Boost Converter" Conference proc. Recent Advances in Science and Technology (RAST 2k16), FAMT Ratnagiri, Pages 89-93. Feb. 2016
3. Vaibhav A. Sansare, Milind N. Tagare, Jayant J. Mane and Nitin V. Kelkar, "Design of Solar Battery Charger with voltage controlled Buck Converter", Conference proc. Recent Advances in Science and Technology (RAST 2k16), FAMT Ratnagiri, pages 116-121. Feb. 2016
4. Jayant J. Mane, Sanjay S. Swami, Amit S. Pawaskar and Uday V. Patil, "Electronic Differential for Electric Vehicle with FOC controlled Two Wheel Drives", Conference proc. Recent Advances in Science and Technology (RAST 2k16), FAMT Ratnagiri, pages 83-88. Feb. 2016
5. Hemant J. Mane, Jayant J. Mane and Mohan V. Aware, "Performance Evaluation of Carrier Based PWM with harmonic injection Multilevel Inverters", National Conference on Innovative Smart Grid Technologies, AISSMS COE, Pune, March 2012
6. Jayant J. Mane and Mohan V. Aware, Member IEEE. "A Comparative Study of Different Multi-Level Inverters Under Different Modulation Strategies." Conference proc. NPEC 2011 (National Power Electronic Conference), BESU, Kolkata, Dec.2011

Number of Workshops, Seminars, STTPs, FDPs, Courses, tutorials Attended – 24

1. Completed 12 week certified NPTEL course on "Design of photo voltaic systems" conducted by Prof. L. Umanand IISC Bangalore, during Aug-October 2017
2. Two-day workshop on "Raspberry Pi" at Finolex academy of management and technology, Ratnagiri during 10-11 Feb 2016.
3. One-week FDP on "FACTS Devices and Distributed Generation through ICT" by National Institute of Technical Teachers Training and Research, Chandigarh online at FAMT Ratnagiri, during 6– 10 Feb, 2017

4. One-week FDP on "Advances in control systems" at Dr. BATU, Lonere during 7-11 Nov 2016
5. One-week workshop on "Funding Schemes Available for Research Proposal" conducted by Research, development and consultancy cell (RDCC), Finolex academy of management and technology, Ratnagiri on all weekends between 13 Feb-23 April 2016.
6. One-week short term course (TEQIP-II Sponsored) on "Power Electronic Circuits and Control" conducted by EED, S. V. National Institute of Technology, Surat, during 14-18 Dec 2015
7. Two-day national workshop on "Project Based Learning" conducted by Vishvaniketan i-MEET, Khalapur, Navi Mumbai, during 10-11 Jan 2015
8. Two week ISTE workshop on "Control Systems" conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), June 2014
9. Two-week ISTE workshop on "Signals and Systems" conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 2-12 Jan 2014.
10. Two-week ISTE workshop on "Analog Electronics" conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 4-14 June 2013.
11. Tutorial on "EMI: Theory, Coupling Mechanisms, Equivalent circuits and Solutions" PEDES 2012, CPRI, Bangaluru, Dec. 2012. Attended tutorial on "Resonant and Soft Switching Power Conversion" PEDES 2012, CPRI, Bangaluru, Dec. 2012.
12. Tutorial on "Novel Snubberless Bi-directional Soft-Switching current-fed dc/dc converters" PEDES 2012, CPRI, Bangaluru, Dec. 2012.
13. Tutorial on "Advanced Power Electronic Technology for Greener Electric and Plug-in Hybrid Electric Vehicular" PEDES 2012, CPRI, Bangaluru, Dec. 2012.
14. Tutorial on "Digital Control of Dynamic Systems: Design Issues" PEDES 2012, CPRI, Bangaluru, Dec. 2012.
15. Tutorial on "Resonant and Soft Switching Power Conversion" PEDES 2012, CPRI, Bangaluru, Dec. 2012.
16. Two-day ISTE workshop on "Aakash for Education", conducted by IIT Bombay, Nov. 2012.
17. Tutorial on "Pulse width Modulation for Power Electronic Converters" NPEC 2011, BESU, Kolkata, Dec. 2011.
18. Tutorial on "Control of Power Electronic Systems – Digital Solutions" NPEC 2011, BESU, Kolkata, Dec. 2011.
19. Three-day course on "Solar PV systems: Basic Design & Integration." conducted by IIT Bombay during 24-26 Feb 2011.
20. One-day workshop on "Solar PV Systems- Technology, risks, manufacturing, EPC, O&M, investment" during "First India International Energy Summit" held at held at Visvesvaraya National Institute of Technology, Nagpur; from 28-30 January 2011.
21. "First India International Energy Summit" held at held at Visvesvaraya National Institute of Technology, Nagpur; from 28-30 January 2011.
22. Two-day workshop on "Fuzzy logic and its applications" by Dr. Deshpande, Department of instrumentation, COEP, Pune.
23. Two-day short term training program on "Simulation of Electronic and Power electronic circuits, using SEQUEL" by Prof. M. B. Patil, IIT Bombay.

24. One-day workshop under ISTE chapter on "Quality Education in Engineering and Technical Institutions" at FAMT, Ratnagiri.

Professional Membership

1. Life member of Indian Society of Technical Education (I.S.T.E)

Exam Duties

1. Worked as a **Joint Chief Conductor** for Dec 2013
2. Carried out exam related duties such as **Paper Setter, Moderator, Examiner and External Examiner** for conducting theory, practical and oral exam as appointed by Board of Examination, Mumbai University.
3. Worked as **External Examiner** for Examinations Conducted by Dr. BATU, University of Solapur and University of Pune
4. Worked as **Syllabus Revision Committee of University of Mumbai** for the branch of Electrical Engineering

Other Experience

College/Department Level Committees

1. Working as Mentor for the Team of 40 Students who got 2nd Runner-up Prize in "National Solar Vehicle challenge 2018 (NSVC)" and Runner-up prize for "Lightest Vehicle" held at Gujrat
2. Working as EESA (electrical engineering student's association) Faculty in-charge
AY 2015-16 Conducted 9 Events, Arranged 4 Industrial Visits
AY 2016-17 Conducted- Conducted 9 Events including one Tech-fest (2days, 11 events), Arranged 4 Industrial Visits
AY 2017-18 -Conducted 22 Events including one Tech-fest (2days, 11 events), Arranged 4 Industrial Visits
3. Working as a department coordinator for NAAC Criteria 3 committee and Student Association activities
4. Working as a Member of Admission Counselling Committee for engineering Admission.
5. Working as a Member of Infrastructure Committee (Deadstock reforms, checking, maintenance registers, Consumable registers, write-off policy, formation of store department, Sign boards in college campus)
6. Working as a Member of E-magazine Committee of college
7. Working as a Member of Cultural Events Committee of college (All cultural events throughout the year are planned and executed by this committee)
8. Worked as departmental organizing committee member in 2nd National Conference on "Recent Advances in Science and Technology"

9. College Campus Electrical maintenance in-Charge
10. Boys Hostel rector

Judge Panel / Staff Selection Committee / Subject Expert

1. Worked as a Teaching Assistant for two-week STTP on "Electric Power system" organized by IIT, Kharagpur, from 12th June -11th July 2017
2. Worked as a Judge for many college level ethical non-technical events.

Subjects Taught

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	Drives and Control	B.E. ELECT (Sem - VIII)	9 Year
2.	Power Electronics	T.E. ELECT (Sem - V)	5 Years
3.	High Voltage DC Transmission	B.E. ELECT (Sem - VII)	5 Years
4.	Industrial Electronics	S.E. MECH (Sem - VI)	8 Years
5.	Basic Electrical and Electronics Engineering	F. E. ALL BRANCHES (Sem - I)	5 Years
6.	Electrical Workshop	B.E. ELECT (Sem - VIII)	1 Year
7.	Electrical and Electronics Measurements	B.E. ELECT (Sem - VIII)	1 Year