DR.J VENKATARAMANAIAH

Assistant Professor
Department of Electrical Engineering
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CAREER VISION

To work in a challenging environment demanding all my skills and efforts to explore and adapt myself in different fields and realize my potential where I get the opportunity for continuous learning.

EDUCATION

Program	Institution	Specialization	Year
Ph.D.	National Institute of Technology Karnataka, Surathkal	Investigation on Multilevel Inverters	2015-2019
M.Tech.	RGMCET,Nandyal	Power Electronics	2012-2014
B.Tech.	Gokula Krishna College of Engineering,Sullurpet	Electrical & Electronics Engineering	2008-2012
Intermediate	A.P.S.W.R.School & Jr. College, Chillakur	M.P.C	2006-2008
SSC	A.P.Res.School(BC) boys, Doravarisathram	-	2005-2006

RESEARCH PROFILE AT A GLANCE

Number of SCI journal papers: 08, Number of conference papers: 04, H-index: 4*, i10-index: 3*, Number of citations: 81*
Source: *Google Scholar (`https://scholar.google.co.in/citations?user=iiYLLk4AAAAJ&hl=en&authuser=1`)

TEACHING STATEMENT

I believe to teach is to learn twice. In my opinion learning should be a consistent and continuous process with more student-to-teacher interaction. My goal as an instructor is to present relevant material as clearly as possible. I place a lot of emphasis on fundamentals and basic concepts and cover them in depth. I recommend that students exercise their own powers of critical problem solving, creativity, analysis. I insist the students to remain abreast with the present day technology. Before testing the students, I expose them to concepts two times; once in the lecture via examples, a second time by homework assignments.

STRENGTHS AND SKILLS

- I can easily adapt to new environment and learn things at a rapid pace.
- Dedication to the achievement of organizational goals.
- Positive approach towards the work.
- Ability to work under any condition with positive outlook.
- Ability to successfully manage multiple priorities and assignments.

MEMBERSHIP IN PROFESSIONAL BODIES

- IEEE Graduate Student Member (94229601)

PROFESSIONAL ACTIVITIES

- Served/serving as reviewer in the following journals and conferences:
    1. IEEE Transactions on Power Electronics

2. IEEE Transactions on Transportation Electrification
3. IEEE Transactions on Power Delivery
4. International Journal of Power Electronics and Drive Systems (IJPEDS)

TECHNICAL PROFICIENCY

- CONTROL PLATFORMS
  1. OPAL-Real Time Simulation (HIL and SIL)
  2. Dspace-Real Time Simulation (HIL and SIL)
  3. Arduino
  4. STM32F407VGT6- Micro controller
- SOFTWARES
  1. MATLAB-Simulink
  2. PCB Design (Eagle)

BROAD RESEARCH INTERESTS

- Power electronics
- Multilevel converters
- Control techniques
- Grid inverters

EXPERIENCE

- Presently working as an Assistant Professor in Department of Electrical Engineering of SVNIT, Surat, India, from October-24,2019.
- Temporary Faculty in Department of Electrical and Electronics Engineering of National Institute of Technology Karnataka, India, form July-17, 2018 to May-10, 2019.

SHORT TERM COURSES AND WORKSHOPS ATTENDED

- Short Term Course on **Microcontroller based Power Electronics System Implementation** (MPESI-2017) 14 – 18 August, 2017 Electrical Engineering Department, SVNIT, Surat.
- Training programme on **OPAL-RT solutions**, Bangalore from March 06 to March 11, 2017.
- One day workshop on **Overview of Variable Frequency Electrical Drives, Refregeration and Air-Conditioning** Conducted by DANFOSS INDIA aUG-03,2013 in association with VTU University, Vellore.
- One Week Workshop on **Recent Trends in Power Systems Operation ans Control** held during June 11 to June 15, 2018 at NITK Surathkal.

TEACHING ASSISTANCE IN PH.D.

- COURSEWORK ASSISTANCE

I have done simple tasks like taking attendance, make sure for the functioning of projector/laptop, convey lecture timetable changes to the students. Sometimes the Professor wants me to make lecture slides or take tutorial sessions for the following subjects.

1. Analog Electronics
2. Digital Electronics
3. Advanced Power Electronics

- LABORATORY TUTORIALS
- SUPERVISE EXAMINATIONS

PEER REVIEWED JOURNALS

J1. Shiva Naik, Banavath, Yellasiri Suresh, and **Jammala Venkataramanaiah**. "Experimental verification of a hybrid multilevel inverter with voltage-boosting ability", International Journal of Circuit Theory and Applications 48.3 (2020): 420-434.

J2. Bhukya Nageswar Rao,Yellasiri Suresh, and **Jammala Venkataramanaiah**, Banavath Shiva Naik, and A.K.Panda."Development of Cascaded Multilevel Inverter Based Active Power Filter with Reduced Transformers", CPSS Transactions on Power Electronics and Applications,2020 (accepted)

J3. Hadik Azeem, Y.Suresh, **J.Venkataramanaiah**, Banavath Shiva Naik, and A.K.Panda., "A Novel Fuzzy Logic Based Switching Methodology for a Cascaded H-Bridge Multilevel Inverter.2019" *IEEE Trans. Power Electronics* .

J4. Banavath Shiva Naik, Y.Suresh, **J.Venkataramanaiah** and A.K.Panda., "Design and Implementation of a Novel Nine-Level Modified T-type MultilevelInverter with Self Voltage-Balancing Switching Technique," *IET Electronics letters* (**2019**) .

J5. **J.Venkataramanaiah**, Y.Suresh, and A.K.Panda., "Development of a New Hybrid Multilevel Inverter Using Modified Carrier SPWM Switching Strategy.," *IEEE Trans. Power Electronics* , Feb. 2018.

J6. **J.Venkataramanaiah**, Y.Suresh, and A.K.Panda., "A review on symmetric, asymmetric, hybrid and single DC sources based multilevel inverter topologies.," *Renew. Sustain. Energy Reviews*, vol. 76, pp. 788-812, Feb. 2017.

J7. **J.Venkataramanaiah** Y.Suresh, and A.K.Panda., "Design and Development of a Novel 19-Level Inverter Using an Effective Fundamental Switching Strategy.," *IEEE Journal of Emerging and Selected Topics in Power Electronics.*, Nov. 2017.

J8. Y.Suresh, **J.Venkataramanaiah**, A.K.Panda, C.Dhanamjayulu, & P.Venugopal, "Investigation on cascade multilevel inverter with symmetric, asymmetric, hybrid and multi-cell configurations.," *Ain Shams Engineering Journal*, vol. 8, no. 2, pp. 263-76, Jun. 2017.

J9. **J.Venkataramanaiah**, V. Naga Bhaskar Reddy, and Ch. Sai Babu., "Harmonic reduction of Cascaded MLI fed Induction Motor Drive using Modified Modulation Strategies," *International Journal of Research in Engineering and Technology*, vol. 3, special Issue 12,, Jun. 2014.

PEER REVIEWED CONFERENCE PROCEEDINGS

C1. **J.Venkataramanaiah,** and Y.Suresh, "Performance Verification of a New Cascaded Transformer Based Multilevel Inverter Using Modified Carrier SPWM Strategy," *In Proc. International Conference on Emerging Trends in Engineering, Science and Technology (ICETEST)* ,PICC, IEEE, Thrissur, India, pp. 1-6.2018.

C2. Naik B. S., **J Venkataramanaiah**, Reddy K. S., & Suresh, Y. , "Design and implementation of a symmetrical multilevel inverter topology," in *International Conference on Inventive Systems and Control (ICISC-2017)*, pp. 1-5.2017.

C3. **J.Venkataramanaiah**, K.S.Reddy, and Y.Suresh, "Design and Implementation of a Symmetrical Multilevel Inverter Topology," in *In Proc. National Conference on Recent Trends in Power Engineering (NCRTPE)* ,IITM, chennai, India, 2015.

C4. **J.Venkataramanaiah**, V. Naga Bhaskar Reddy, and Ch. Sai Babu "Harmonic reduction of Cascaded MLI fed Induction Motor Drive using Modified Modulation Strategies ," in *International Conference on Advanced Electrical Systems & Applications (AESA-2014)*, GPE College,Kurnool, Andhrapradesh.

AWARDS AND SCHOLARSHIPS

- 2012-2014, Scholarship for postgraduate study at the Department of Electrical and Electronics Engineering, JNTU University awarded by Department of Human Resource and Development, Govt. of India.
- 2015-2018, Scholarship for perusing research study at the Department of Electrical and Electronics Engineering, NIT-Karnataka, awarded by Department of Human Resource and Development, Govt. of India.

PERSONAL INFORMATION

- Name: J Venkataramanaiah
- Father's Name: J Kasthuraiah
- Mother's Name: J Pullamma
- Nationality: Indian
- Religion: Hindu
- Date of Birth: 03.04.1990
- Marital Status: Married
- Language proficiency: Telugu, English; Level - Fluency in listening, speaking, reading and writing

DECLARATION

I hereby declare that all information furnished above are true, complete and correct to the best of my knowledge and belief.

Date: 15.04.2020
Place: SVNIT Surat.

Dr. J Venkataramanaiah