


### ***Personal Information:***

Name	Mr. Machavaram Sandeep Kumar	
Years of Experience	Teaching: 6 Y 9 M Research: NIL Industry: NIL	
Email ID	sandeepkumar.m@bvrithyderabad.edu.in	
Course Networking (CN) Id:	SM2570	
Areas of Specialization	Power Systems	

### ***Educational Details:***

Ph.D. (Pursuing)	Power Systems	JNTUK
M.Tech.	Power Systems	JNTUA
B.Tech.	Electrical & Electronics Engineering	JNTUA

### ***Papers Published:***

#### ***International Journal Publications:***

1. Guruswamy Revana, Sujatha Banka, Bhavya Kanchanapalli, Babita Gupta, Amritha K and Machavaram Sandeep Kumar, “Intelligent Planning and Operation of Power Systems during Load Change: A Case Study of Indian Scenario during Covid-19 Pandemic”, Journal of Xidian University, ISSN No:1001-2400.
2. Machavaram Sandeep Kumar, S. Rakesh, Dr. Shaik Rafi Kiran, “Fuzzy based MLI-DSTATCOM with Synchronous reference frame in distribution network” IJSETR, ISSN:2319-8885, Vol.06, Issue.20, June-2017, Pages:3850-3855.
3. Machavaram Sandeep Kumar, S. Rakesh, Dr. Shaik Rafi Kiran, “Design and Analysis of Fuzzy and PI controller based MLI-DSTATCOM with SRF theory” IJAERS, ISSN: 2349-6495(P) / 2456-1908(O), Special issue-5.

#### ***Book Chapters:***

1. Sandeep Kumar M., Sruthi Meghana S., Geyavarshini B., Sai R.P., Sukruthi M. (2021) Analysis of Software Tool for Voltage Profile Improvement in IEEE 14-Bus System Using SVC. In: Reddy K.A., Devi B.R., George B., Raju K.S. (eds) Data Engineering and Communication Technology. Lecture Notes on Data Engineering and Communications Technologies, vol 63. Springer, Singapore.

### ***Conferences Attended:***

1. Presented a paper titled “Analysis of Software Tool for Voltage Profile Improvement in IEEE 14-Bus System Using SVC” in the Springer 4th International Conference on

Data Engineering & Communication Technology (ICDECT-2020) organized by the Department of Electronics and Communication Engineering (ECE), Kakatiya Institute of Technology & Science (KITS), Warangal, Telangana during 25-26 September, 2020.

2. Presented a paper entitled “Design and Analysis of Fuzzy and PI controller based MLI-DSTATCOM with SRF theory” in National Conference on Trends in Engineering and Technology (NCTET-2K17) held at SV Colleges, Tirupati.

***FDP's/Induction Programme/ Refresher Programme/Workshop/STTP Attended:***

1. Attended 12-week NPTEL course on “Computer-Aided Design of Electrical Machines” from Jan-April 2024.
2. Attended 12-week NPTEL course on “Design of Photovoltaic Systems” from July-October 2024.
3. Attended “Fundamentals of Python Programming” Online Workshop on 11.06.2023, organized by Codingbrains.
4. Attended UGC Approved Short-term Professional Development Programme on "Implementation of NEP-2020 for University and College Teachers" held from 08.05.2023 to 16.05.2023 organised by IGNOU, Delhi.
5. Attended 5-day Faculty Development Program on "Python for Electrical and Electronics Engineering: A Faculty Development Program on Python Applications" organized by the department of EEE, Rajeev Gandhi Memorial College of Engineering and Technology (Autonomous), Nandyal, from 27.03.2023 to 31.03.2023.
6. Attended the National Level Workshop entitled “Modern Power System” organized by the Department of Electrical and Electronics Engineering, NIT Nagaland from 10.02.2023 to 14.02.2023.
7. Attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Data-Driven Strategies in Smart Power System and Control" organized by NIT Andhra Pradesh from 22.11.2021 to 26.11.2021.
8. Attended NPTEL-AICTE Full FDP on “Design for Internet of Things” organized by SWYAM-NPTEL Online Courses and Certification from 26.07.2021 to 17.09.2021.
9. Attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Challenges and Control of Green and Sustainable Energy systems using Artificial

Intelligence techniques" organized by BVRIT HYDERABAD College of Engineering for Women from 09.08.2021 to 13.08.2021.

10. Attended AICTE ATAL Sponsored one-week online FDP on “Nature Inspired Optimization Techniques” organized by NIT Delhi from 19.07.2021 to 23.07.2021.
11. Attended ATAL Sponsored One Week FDP on “AI Solution for Optimum Utilization of Power and Energy” organized by NIT Srinagar from 05.07.2021 to 09.07.2021.
12. Attended Five-Day FDP on “Recent Advances in Electrical Energy Management, Control and Automation” organized by Lakireddy Bali Reddy College of Engineering, Mylavaram from 08.06.2021 to 12.06.2021.
13. Attended AICTE Sponsored One Week Online STTP on " Recent Advances in EV Technologies" organized by Matrusri Engineering College, Hyderabad from 17.05.2021 to 22.05.2021.
14. Attended AICTE-ISTE INDUCTION/REFRESHER PROGRAMME on “Solar PV System Design Using IoT” organized by SVCE Chennai from 05.05.2021 to 11.05.2021.
15. Attended one-week STTP on “Optimization with MATLAB” organized by NITTTR Kolkata from 14.12.2020 to 18.12.2020.
16. Attended AICTE ATAL Academy online FDP on “Advanced Control and Wireless Sensors for Smart Distribution Network with Renewable Energy Integration” organized by NIT Meghalaya from 09.11.2020 to 13.11.2020.
17. Attended AICTE sponsored online STTP Phase-II on “Renewable Energy Development in Deregulated Power Market: Future Scenario” organized by Jayamukhi Institute of Technological Sciences from 24.08.2020 to 29.08.2020.
18. Attended Short Term Course on Applications of HIL Simulations in Electrical Engineering (In collaboration with Typhoon HIL) scheduled from 24.08.2020 to 28.08.2020 conducted in online mode by NITTTR, Chandigarh.
19. Attended international Online 5-Days Faculty Development Program On “Real-Time Applications of Opal-RT for Power Electronics, Smart Grid and Microgrids” in association with Opal-RT held from 03.08.2020 to 07.08.2020 organized by School of Electrical Engineering, VIT Chennai.
20. Attended AICTE sponsored online FDP on “AI Techniques to Electrical Engineering" scheduled during 06.07.2020 to 10.07.2020 organized by JNTUH HRDC Hyderabad.
21. Attended Five days online Faculty Development Programme on "Recent Advancements in Green and Sustainable Energy Resources" during 29.06.2020 –

- 03.07.2020 organized by the Department of Electrical and Electronics Engineering of Paavai Engineering College.
22. Attended International Level One Week Faculty Development Programme on “Industrial Relevance of Electrical Engineering” organized by Department of EEE, BVRIT HYDERABAD College of Engineering for Women from 15.06.2020 to 20.06.2020.
  23. Attended 5 days FDP on Recent Challenges in Power systems organized by S.V. College of Engineering, Tirupati from 22-06-2020 to 26-06-2020.
  24. Attended one week FDP on Moodle Learning Management System organized by JNTUH College of Engineering, Sultanpur in association with Spoken Tutorial Project IIT-Bombay from 10-06-2020 to 15-06-2020.
  25. Attended A National Level Five Day Online Faculty Development Programme on “ELECTRIC POWER GRID MODERNIZATION TRENDS, CHALLENGES AND OPPORTUNITIES” Organised by Department of Electrical and Electronics Engineering, KITS, Guntur, Andhra Pradesh from 09.06.2020 to 13.06.2020.
  26. Attended online FDP on “Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles” during 01-06-2020 to 05-06-2020, Organized by Department of Electrical & Electronics Engineering, Bapatla Engineering College, Bapatla.
  27. Attended One week FDP on “Implementation and Simulation of Electrical Engineering Applications using PLECS” from 25.05.2020 to 29.05.2020 organized by Vaagdevi College of Engineering.
  28. Attended National Level ONE-WEEK FDP on “SCILAB-An Open-Source Substitute for MATLAB” from 25.05.2020 to 30.05.2020 organized by JNTUHCES.
  29. Attended One Week Faculty Development Program on “eSim” organized by E&TC Engineering of AISSMS IOIT, Pune from 05.05.2020 to 10.05.2020.
  30. Attended one-week National FDP and online training on “LaTeX” organized by Sanjay Ghodawat University, Kolhapur in association with Spoken Tutorial Project IIT-Bombay from 27.04.2020 to 02.05.2020
  31. Attended 3 days FDP on Immersive Instructional Technology -Level1 organized by VEDIC, SVES from 21.01.2020 to 23.01.2020.
  32. Attended one day workshop on “Unconscious Bias in the Workplace” at VEDIC, Hyderabad on 08.08.2019.

33. Attended a Three-day FDP on “Professional Etiquette & Emotional Intelligence” from 08.07.2019 to 10.07.2019

***Achievements/Certifications:***

1. Course Certification on “Computer-Aided Design of Electrical Machines” organized by SWYAM-NPTEL Online Courses and Certification.
2. Course Certification on “Design of Photovoltaic Systems” organized by SWYAM-NPTEL Online Courses and Certification.
3. Course Certification on “Introduction to battery-management systems” an online non-credit course authorized by University of Colorado System and offered through Coursera.
4. Course Certification on “AI For Everyone” an online non-credit course authorized by deeplearning.ai and offered through Coursera.
5. Course Certification on “Outcome Based Education (OBE) and Academic Quality Assurance (AQA) through UDEMY.
6. Received “Certificate of Merit” for best paper in National Conference on Trends in Engineering and Technology (NCTET-2K17) held at SV Colleges, Tirupati.

***AICTE-NITTT Modules:***

Successfully completed the first phase of the training programme for the Inductee Teachers conducted in Massive Open Online Courses (MOOCs) mode for the following eight modules on the SWAYAM platform through the NITTT portal from September 2021 to March 2023 under AICTE Faculty Development Schemes.

1. Module-1: Orientation towards Technical Education and Curriculum Aspects.
2. Module-2: Professional Ethics & Sustainable Development.
3. Module-3: Communication Skills, Modes and Knowledge Dissemination.
4. Module-4: Instructional Planning and Delivery.
5. Module-5: Technology Enabled Learning and Life-Long Self Learning.
6. Module-6: Student Assessment and Evaluation.
7. Module-7: Creative problem Solving, innovation and Meaningful R & D.
8. Module-8: Institutional Management and Administrative Procedures