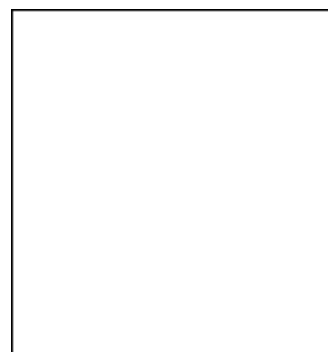


Faculty Profile

Brief Profile (Few Paragraphs)

Dr. Pandry Narendra Rao is a committed faculty with over 4 years of teaching experience at institutions such as RV College of Engineering, and Sreenidhi Institute of Science & Technology. He specializes in multilevel converters and renewable energy systems. He holds a Ph.D. from NIT Kurukshetra and has published multiple SCI-indexed journal papers.



Personal Information

- **Name:** Dr. Pandry Narendra Rao
- **Designation:** Assistant Professor
- **Department:** Electrical and Electronics Engineering
- **Email:** pnrao@rvce.edu.in
- **Phone:** +91-9885414398

Google Scholar: <https://scholar.google.com/citations?user=1MnOofAAAAJ&hl=en>

ORCID: 0000-0003-3839-5717

Domain of Expertise

Research Focus

- **Primary Area:** Power Electronics, Renewable Energy Systems Grid integration, EV, Electric Drives
- **Allied Areas:**
 - Microgrid, Standalone/Grid connected Renewable Energy System, DC-DC Converters, Multi-level converters, Electric Drives

Academic Qualifications

- **Ph.D.:** Electrical Engineering, NIT Kurukshetra, 2022 (*Efficient Renewable Energy Conversion using Multi-level Converters*)
- **M.Tech:** Power and Industrial Drives, JNTU Anantapur, 2015
- **B.Tech:** Electrical and Electronics Engineering, JNTU Hyderabad, 2008

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)

1.	RV College of Engineering (Autonomous) affiliated to Visvesvaraya Technological University	Assistant Professor	2022-Present
2.	Sreenidhi Institute of Science & Technology (Autonomous) affiliated to Jawaharlal Nehru Technological University Hyderabad.	Assistant Professor	2015-2017
3.	Trident TechLabs Pvt. Ltd., Delhi-110055	Project Engineer	2011-2012
4.	M/s IL&FS Engineering and Construction Company Ltd. Hyderabad.	Site Engineer	2008-2011

Publications & Patents

Journal Publications

- [1] Rao, PN, Saini, LM. Photovoltaic-based grid-connected transformer-less three-phase cascaded diode-clamped multilevel inverter with reduced leakage current. Int J Circ Theor Appl. 2022; 1-25. <https://doi.org/10.1002/cta.3257>. (Indexed in SCI) (Impact factor- 2.038)-Q3
- [2] Rao, PN, Saini, LM. Power enhancement of single-phase transformer-less grid-connected cascaded half-bridge diode clamped inverter under partial shaded photovoltaic. Int Trans Electr Energ Syst. 2021;e12998. <https://doi.org/10.1002/2050-7038.12998>. (Indexed in SCIE) (Impact factor- 2.860)-Q2
- [3] P. N. Rao, L. M. Saini, and J. Nakka, "Cascaded diode clamped inverter-based grid-connected photovoltaic energy conversion system with enhanced power handling capability and efficiency," IET Renew. Power Gener., vol. 15, no. 3, pp. 600–613, Feb. 2021, doi: 10.1049/rpg2.12046. (Indexed in SCIE) (Impact factor- 3.894)-Q2
- [4] P. Narendra Rao and J. Nakka, "A Novel Hybrid Multilevel PWM Technique for Power Rating Enhancement in Improved Hybrid Cascaded Diode Clamped Multilevel Inverter," Electr. Power Components Syst., vol. 47, no. 11–12, 2019, doi: 10.1080/15325008.2019.1659455. (Indexed in SCIE) (Impact factor- 1.071)-Q3

Conference Papers

- [1] S. G. Srivani, P. Narendra Rao, V. Srinivasulu, B. R, and A. L. Appanna, "PV Powered BLDC Motor Using Fuzzy Logic MPPT Controller for Electric Vehicle," in 2023 7th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 2023, pp. 1–6. doi: 10.1109/CSITSS60515.2023.10333325.
- [2] S. G. Srivani, P. N. Rao, S. R, S. J. K, and H. J. P, "A Novel High Gain Boost Converter for PV System

with Fuzzy Logic MPPT Controller,” in 2023 7th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 2023, pp. 1–5. doi: 10.1109/CSITSS60515.2023.10334146.

- [3] A. Pareek, P. Singh, and P. N. Rao, “Analysis and Comparison of Charging Time between Battery and Supercapacitor for 300W Stand-Alone PV System,” in 2018 International Conference on Current Trends towards Converging Technologies (ICCTCT), 2018, pp. 1–6. doi: 10.1109/ICCTCT.2018.8551164.
- [4] P. N. Rao and J. Nakka, “Three-Phase Four-Leg Four-Wire Topology in High Power Factor Converter addressing the problem of unbalanced source currents,” in 2018 IEEE 8th Power India International Conference (PIICON), 2018, pp. 1–6. doi: 10.1109/POWERI.2018.8704390.
- [5] Sharma, B., Rao, P.N., Nakka, J., Manna, S. (2024). Three-Phase Three-Leg Four-Wire High Power Factor Converter Addressing the Problem of Unbalanced DC Link Capacitor Voltages. In: Gupta, O.H., Kumar Samal, S., Mahanty, R., Singh, B., Colak, I. (eds) Recent Advances in Power Electronics and Drives. EPREC 2024. Lecture Notes in Electrical Engineering, vol 1240. Springer, Singapore. https://doi.org/10.1007/978-981-97-6091-6_2

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

- **Field Oriented Control (FOC) based BLDC/Stepper Motor Drive Electronics** – Funding Agency: ISRO, Duration: 2025–2027, Role: Co-PI.

Awards & Recognitions

- MHRD Fellowship recipient.

Student Supervision

- **M.Tech. Students:** 03
- **Undergraduate Research Mentees:** 03

Professional Roles

- **Reviewer:** International Journal of Circuit Theory and Applications

Teaching

Core Courses: [Current semester]

- ANALYSIS AND CONTROL OF AC AND DC DRIVES,
- POWER ELECTRONICS IN RENEWABLE ENERGY INTEGRATION
- POWER ELECTRONICS & APPLICATIONS
- ELEMENTS OF ELECTRICAL ENGINEERING
- FUNDAMENTALS OF PROGRAMMING USING C

Advanced/Lab Courses:

- SOLAR AND WIND ENERGY SYSTEMS

Professional Roles

Responsibilities

- **Academic:** Website Co-Ordinator
- **Administrative:** Power Electronics Lab In-charge