



# ANNAMACHARYA UNIVERSITY

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY  
(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)  
Rajampet, Annamayya District, A.P – 516126, INDIA

## Faculty Profile

### Basic Information:

NAME : T. PENCHALAIAH  
DESIGNATION : ASSISTANT PROFESSOR  
DEPARTMENT : EEE  
DATE OF BIRTH : 02.06.1993  
DATE OF JOINING : 06.10.2023  
EMAIL ID : PENCHALAIAH99@GMAIL.COM  
EMPLOYEE ID : 1735



### Academic Profile:

| Qualification | Name of the Board/University                           | YEAR                         |
|---------------|--------------------------------------------------------|------------------------------|
| Ph .D         | Sri Venkateswara University, Tirupati                  | Pursuing<br>(Joined in 2022) |
| M. Tech       | Jawaharlal Nehru Technical University,<br>Anantapuramu | 2017                         |
| B. Tech       | Vikrama Simhapuri University, Nellore                  | 2014                         |
| Intermediate  | Board of Intermediate Education, Andhra Pradesh        | 2010                         |
| SSC           | Board of Secondary Education, Andhra Pradesh           | 2008                         |

### Research Details:

|                                        |                        |                          |
|----------------------------------------|------------------------|--------------------------|
| 1. Areas of Specialization             | :                      | Electrical Power Systems |
| 2. No. of Publications                 | :                      | 10                       |
| 3. Awards Received                     | :                      | NA                       |
| 4. Research Guidance                   |                        |                          |
|                                        | No. of PhD Guided:     | NA                       |
|                                        | No. of MTech. Guided:  | NA                       |
|                                        | No. of B.Tech. Guided: | 8                        |
| 5. Details of Professional Membership: |                        | ISTE and IAENG           |



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|                    |   |                                                                                                                                                               |
|--------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. Subjects Taught | : | BEEE, ELECTRICAL MACHINES - I, ELECTRICAL CIRCUITS, DIGITAL ELECTRONICS, ELECTRICAL VEHICLES, MICRO PROCESSOR AND MICRO CONTROLLERS, FACTS, NETWORK ANALYSIS. |
|--------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Publication Details:

| Title                                                                                                                    | Publisher                | Published Year |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|
| Modified Synchronous Reluctance Motor for Electric Vehicle Application                                                   | FOREX                    | 2022           |
| Breast Cancer Detection Using Ensemble Learning Model                                                                    | SPRINGER                 | 2022           |
| IoT-Based Automatic Forest Fire Extinguisher                                                                             | SPRINGER                 | 2022           |
| Reduced Switch Count Multilevel Inverters—A Review                                                                       | SPRINGER                 | 2022           |
| Gas Level Monitoring and Automatic Gas Booking Using IOT-Based Technology for Commercial Applications                    | SPRINGER                 | 2022           |
| Performance Investigation of Five Level Cascaded Multilevel Inverter-Based Solar PV System with Charge Balance Control   | SPRINGER                 | 2022           |
| Enhancing Harmonic Reduction of Grid Connected Wind-Solar PV Charging Station using Neural Network Controller            | IEEE                     | 2023           |
| Radial Systems Including DGS Distribution Loss Allocation Using PSO Algorithm                                            | IEEE                     | 2024           |
| Advanced control strategy for grid-connected DFIG systems using TSK-fuzzy controllers                                    | Taylor and Francis group | 2025           |
| Dual Fuzzy-Sugeno Controlled Grid-Forming Voltage-Source Inverter for Hybrid Wind-Solar Systems in Weak Grid Integration | IEEE                     | 2025           |

## Patent Details: NA