Faculty Profile Format

1. Basic Information

- **Name: Dr. Sushma Patil**

- **Designation: Associate Professor**

- **Department: Electrical and Electronics Engineering**

- **University/Institution: Sharnbasva University**

- **Email: sushgecw@gmail.com**

- **Phone (if applicable): 9538754306**

2. Academic Qualifications

- **Ph.D. (if applicable): VTU, 2023**

- **M.Tech / M.E.: VTU, 2012**

- **B.Tech / B.E.: VTU, 2009**

3. Research Interests

- **Area 1 : Power Electronics**

- **Area 2: Power Systems**

4. Publications & Patents :

1. **"Fuzzy-PI controlled cascade H-Bridge Inverter Fed single Phase Induction Motor Drive", International journal of scientific and technology research volume 9, issue 04, April -2020, ISSN - 2277-8616.**

2. **"A Nine-level Switched Capacitor Type Inverter with Boosting Ability", ITEE Journal Information Technology & Electrical Engineering volume 9, issue 3, June 2020, ISSN-2306-708X.**

3. **"A five -level cascaded H-Bridge Multilevel Inverter with reduced number of switches" , ITEE Journal Information Technology & Electrical Engineering, volume 9, issue 3, June 2020, ISSN-2306-708X.**

4. **"Study of AI and PI Controller using SVPWM Technique for Induction Motor Speed Control"2017 International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques (ICEECCOT) 978- 1-5386-2361-9/17/$31.00 ©2017 IEEE .**

5. "A Switched Capacitor Multilevel Inverter with Voltage Boosting Ability "IEEE

Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER)978-1-

7281-9885-9/20/$31.00 ©2020 IEEE.

- **Selected Publications:** *(Include DOI/Link if possible)*

  - [Title], *[Journal/Conference Name]*, [Year]

  - [Title], *[Journal/Conference Name]*, [Year]

- **Patents (if any):**

1. Deep learning for optimization of power and energy management system in hybrid electric vehicle, 4/2/2022

5. Teaching & Courses *(Mention subjects taught)*

1. Basic Electrical engineering
2. Introduction to Basic Electrical engineering
3. Power Electronics
4. Industrial drives and applications
5. Transformer and induction machine
6. Power system analysis
7. Industrial psychology and organizational behavior

6. Awards & Recognitions *(If applicable)* **: NA**

- **[Award Name, Year]**

- **[Recognition/Grant, Year]**

7. Professional Memberships & Collaborations *(If applicable)*

- **Member:**

  1. **IETE** -
  2. **ISTE** –

- **Collaborator: [Research Institute/Industry Name] : NIL**

8. Additional Information *(If applicable – Links to Google Scholar, ResearchGate, LinkedIn, etc.)* **: NIL**

- **[Google Scholar]**

- **[LinkedIn]**

- **[ResearchGate]**

9. Work Experience

- **Total Work Experience: 13 years**

10. Research Contributions

- **Papers Published:**

  - **National: nil**

  - **International: 05**

- **Grants Received (Projects, etc.): [Details]**

- **Ph.D. Guidance: NIL**

  - **Ongoing: -**

  - **Completed: -**

11. Patent Information

- **Status: published**

- **Patent Title:** Deep learning for optimization of power and energy management system in hybrid electric vehicle, 4/2/2022

- **Year: 2022**