

K.SRIDHARAN

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Academic Experience: (8 Years and 6 Months of Teaching and 3 years and 7 Months of Research)

- > Senior Research Fellow (SRF), IIITD&M Kancheepuram, Chennai, Tamilnadu From April 2021 to Still.
- > Junior Research Fellow (JRF), IIITD&M Kancheepuram, Chennai, Tamilnadu From Jan 2019 to March 2021.
- Assistant Professor, Department of Mechatronics Engineering, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai, Tamilnadu From July 2017 to Dec 2018 (1 year and 6 Months)
- ➤ Assistant Professor, Department of Electrical Engineering, Saveetha School of Engineering, SAVEETHA University, Chennai, Tamilnadu, India From Aug 2014 to July 2017 (3 years)
- Assistant Professor, Department of Electrical Engineering, SASTRA University, Kumbakonam, Tamilnadu, India July 2009 to April 2013. (4 Years) (Staff ID:C1567)
- ➤ Research Engineer, Department of Electrical Engineering, National Institute of Technology, Rourkela, May 2013- Nov 2013. (7 Months)

Educational Qualifications:

Ph.D : Pursuing form Indian Institute of Information Technology Design &

Manufacturing (IIITD&M) Kancheepuram, Chennai Joined on Jan 2019

: 9.25 CGPA (First Class)

Area of Research: Grid Integration of Renewable Energy Systems

M.Tech: Awarded from VIT University, Vellore, May 2009.

7.95 CGPA (First Class)

Specialization: Power Electronics & Drives.

B.E: Awarded from Adhiyamaan Engineering College, Anna University, *May 2007*

: Electronics and Communication Engineering.

: 70 % (First Class)

Sponsored Research Project:

Working under the project title of "Development of Novel Grid Synchronization Algorithm for Grid Interactive Photovoltaic Power Generation System" Sponsored by DST- SERB value Rs.35.09 Lakhs.

Prizes/Awards Received:

- Received Best Research Paper Award and Third prize from National Conference and Workshop of "Research challenges in power electronics and power system (RCPEPS2016)" organized by National Institute of Technology (NIT), Calicut on 6th and 7th may 2016.
- Received Best Paper Award for the paper presentation in International Conference on Simulation, Modelling and Analysis (COSMA2011) Organized by Amrita University, Coimbatore, Tamilnadu, 14th December 2011.

Published/Accepted Papers (International Journals):

IEEE Transactions:

- 1. **Sridharan.** K, B.Chitti Babu, "Accurate Phase Detection System using Modified SGDFT based PLL for Three-phase Grid-interactive Power Converter during Interharmonic Conditions", **IEEE Trans. On Instrumentation and Measurement**, **(I.F: 4), DOI:** 10.1109/TIM.2021.3136172. Dec 2021 In Press.
- 2. **Sridharan.** K, B.Chitti Babu, "A Novel Adaptive Band-Pass Filter Based PLL for Grid Synchronization under Distorted Grid Conditions", **IEEE Trans. On Instrumentation and Measurement**, **Under revision (Paper ID: TIM-21-02910)**.
- 3. Subham Ku. Jalan ,B.Chitti Babu, **Sridharan.K** and Gayadhar Panda "A Novel Phase Locked Loop based Control Strategy for a Three-phase Grid-tied Solar PV System," in **IEEE Trans. on Industrial Application-Under review.**

John-Wiley:

4. Subham Ku. Jalan, B.Chitti Babu, **Sridharan. K,** Nitin Gupta, "An improved Control Strategy of Grid-tied Solar Photovoltaic (PV) System using Active Current Detection Method", **International Journal of Circuit Theory and Applications, John-Wiley**, Vol.49, Iss.03, Pp.602-615, March 2021 (I.F: 2).

Elsevier:

5. B.Chitti Babu, **Sridharan.K**, E.Rosoloswki, Z.Leonowicz "Analysis of a Novel Sliding Goertzel DFT based Phase Detection System for Grid-interactive Power Converters", **Engineering Science, and Technology, an International Journal, Elsevier,** Vol: 17, Iss:04, pp.270-278. Dec 2014. (I.F: 4.4).

Springer:

 Sridharan.K, B.Chitti Babu, Pre-filters based Synchronous rotating reference frame phase locked loop (SRF PLL) design for distorted grid conditions, Artificial Intelligence and Evolutionary Computations in Engineering Systems, Springer, ISBN: 978-981-10-3174-8, Pp.113-136. May 2017.

Selected Conference Publications:

- 1. **Sridharan.K** and B.Chitti Babu, "An improved grid synchronization method of gridinteractive power converter system during distorted grid conditions," in **Proc.IEEE 9**th **Power India International Conference (PIICON)** pp. 1–6, Mar.2020.
- 2. Subham Ku. Jalan ,B.Chitti Babu, **Sridharan.K** and Gayadhar Panda "A Novel Phase Locked Loop based Control Strategy for a Three-phase Grid-tied Solar PV System," in **Proc.IEEE** 3rd International Conference on Energy, Power and Environment: Towards Clean Energy Technologies, pp. 1–6, March 2021.

Patent Published:

Sridharan. K, Suraj A Sankar, Alen Mathew George, Vishnu Raj A "A Height Adjustable Table", **Published** on **July 2018**, **Application No. 201841027185 A.** International classification no. A47B9/00.

Primary Research Interest:

- > Grid synchronization algorithm for Distributed Generation (DG) Systems.
- Power Electronics

<u>Selected Academic and Professional Development:</u>

- ➤ IEEE Student Branch Chairman, IIITD&M Kancheepuram, Chennai, Since Jan 2019.
- ➤ Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Energy Storage" from 27-10-2020 to 31-10-2020 at IIITD&M, Kancheepuram.
- ➤ Participated & completed successfully AICTE Training And Learning (ATAL) Academy FDP on "Artificial Intelligence" from 04-12-2019 to 08-12-2019 at IIITDM, Kancheepuram.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy FDP on "Robotics" from 26-09-2019 to 30-09-2019 at IIITD&M, Kancheepuram.
- ➤ Participated in the Short-term Training Program on "PIC microcontroller applications in Power Electronic Circuits" organized by the Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, 22-23 June 2012.

References:

Dr.B. Chitti Babu

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