

Name of Faculty Dr. Annamraju Anil Kumar
 Designation Assistant Professor
 Nature of Job/Appointment Contract
 Date of Joining 01 - 02 - 2023
 E-mail Annamrajuanilkumar_eee@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Power Systems)	Completed
PG	M. Tech. (Power Systems)	Distinction
UG	B. Tech. (EEE)	Distinction

Work Experience

Teaching	3.5 Years
Research	4.5 Years
Industry	--
Others	--

Area of Specialization

Power system operation and control, Artificial Intelligence Techniques, MPPT techniques

Professional Memberships

Member, International Association of Engineers - IAENG Number: 158117

Responsibilities held at Institution Level --

Responsibilities held at Department Level --

Research Guidance --

Awards Received --

Courses Handled at Under Graduate / Post Graduate Level. Basic Electrical & Electronics Engineering, Application of AI techniques to Power System and Power Electronics

No. of Papers Published National Journals – 00 International Journals – 9 [6 SCI 3Scopus]

National Conference – 00 International Conference – 05

Projects Carried out --

Patents --

Technology Transfer --

Invited Speaker --

No. of Books/Chapter Published with details

1. Srinivasarathnam, C., Battapothula, G., Annamraju, A., Yammani, C. (2022). Parameters Estimation of Solar PV Using Jaya Optimization Technique. In: Salkuti, S.R., Ray, P. (eds) Next Generation Smart Grids: Modeling, Control and Optimization. Lecture Notes in Electrical Engineering, vol 824. Springer, Singapore. https://doi.org/10.1007/978-981-16-7794-6_9

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (Attended and/or Organized).

1. Successfully Completed NPTEL 8 week FDP Course on "Introduction to Machine Learning" organized by IIT Kharagpur during JulySeptember 2022.
2. Attended a one-week GAIN course on "Advanced Sliding Mode Controllers for Engineering Applications", Indian Institute of Technology RoorkeeUttarakhand, 24-29 November, 2019
3. Attended a one-week Short-term training program on "Advanced Engineering Optimization through Intelligent Techniques", SardarVallabhbhai National Institute of Technology Surat, 6-10 February, 2017.

4. Attended a two-day workshop on "Free and Open Source Software in Teaching and Learning ", National Institute of Technology Warangal, 4-5 March, 2017

Details of Journal Publications/
Conferences (National and
International)

International Conference :

1. Anil Annamraju et al. " Coordinated control of DEGs and PHEVs for frequency control of two area hybrid microgrid: An effective utilization of PID controller for renewable applications", 3 rd Electric power and renewable energy conference, Lect. Notes Electrical Eng., Vol. 974, Control Applications in Modern Power Systems, NIT Jamshedpur, 2022 (Got best paper award)
2. A. Annamraju and S. Nandiraju, "Load Frequency Control in an Autonomous Microgrid using Robust Fuzzy PI Controller" 2019 8th IEEE India International Conference on Power Systems (ICPS), MNIT JAIPUR, India, 2019, pp. 1-6.
3. L. Bhukya, A. Annamraju and N. Srikanth, "Fuzzy Logic Approach Based Novel Frequency Control Strategy by Wind Turbine Generator in a Wind-Diesel Autonomous Microgrid," 2019 IEEE 1st International Conference on Energy, Systems and Information Processing (ICESIP), Chennai, India, 2019, pp. 1-6, doi: 10.1109/ICESIP46348.2019.8938393.
4. A. Annamraju and S. Nandiraju, "Frequency Control in an Autonomous Two-area Hybrid Microgrid using Grasshopper Optimization based Robust PID Controller," 2018 8th IEEE India International Conference on Power Electronics (IICPE), Jaipur, India, 2018, pp. 1-6, doi: 10.1109/IICPE.2018.8709428.
5. A. AnilKumar and N. V. Srikanth, "Load frequency control for diverse sources of interconnected two area power system: An adaptive fuzzy approach" 2016 IEEE International Conference on Control, Computing, Communication and Materials (ICCCCM), AIT Bangkok and United college Allahabad, 2016, pp. 1-4

National /International Journal :

1. A.Annamraju, Laxman B and S. Nandiraju, " Robust Frequency Control in Standalone Microgrid: An Adaptive Fuzzy Based Fractional Order Cascade PD-PI Approach, Advanced Control for Applications, Vol.3, Issue 3,pp.e72, 2021. (Wiley, Scopus indexed)
2. Laxman B, A. Annamraju and S. Nandiraju, "Robust Frequency Control in a Wind-Diesel Autonomous Microgrid: A Novel Two-Level Control Approach", Renewable Energy Focus, Elsevier, Vol 36, issue 1, 2021. (Elsevier, ESCI & Scopus Indexed)
3. Laxman B, A Annamraju and S Nandiraju, "International Transactions on Electrical Engineering Systems," International Transactions on Electrical Engineering Systems, Wiley, Vol 31, issue 9, 2021.(Wiley, SCI indexed)
4. A. Annamraju and S. Nandiraju, "A Novel Fuzzy Tuned Multi-stage PID Controller for Frequency Dynamics control in an Islanded Microgrid", International Transactions on Electrical Engineering Systems, ,vol 30, issue 12,e12674. (Wiley, SCI indexed)
5. Laxman B, A Annamraju and S Nandiraju, "A Grey Wolf Optimized Fuzzy Logic basedMPPT for Shaded Photovoltaic Systems in Microgrids, ", International Journal of Hydrogen Energy, Vol 46, issue 18,pp.10653-10665 (Elsevier, SCI Indexed)
6. A. Annamraju and S. Nandiraju, "Coordinated control of conventional power sources and PHEVs using JAYA algorithm optimized PID controller for frequency control of a renewable penetrated power system," Protection and Control of Modern Power Systems, Springer, vol.4(28),pp.1-13,Dec.2019. (Springer, SCI)
7. A. Annamraju and S. Nandiraju, "Robust frequency control in a renewable penetrated power system: an adaptive fractional order-fuzzy approach," Protection and Control of Modern Power Systems,. vol. 4, no.1, p. 16, Dec. 2019. (Springer, SCI Indexed).
8. A. Annamraju and S. Nandiraju, "Robust Frequency Control in an Autonomous Microgrid: A Two-Stage Adaptive Fuzzy Approach," Electric Power Components and Systems, Taylor and Francis Inc., vol 46, issue 1, pp. 83–94, Mar.2018.(Taylor & Francis SCI Journal).
9. A Anil Kumar, N. V. Srikanth "Teaching-Learning Optimization Based Adaptive Fuzzy Logic Controller for Frequency Control in an Autonomous Microgrid" International Journal of Renewable Energy Research (IJRER) vol.7.4, pp. 1942-1949 2017. (Ghazi University Journal ESCI, Scopus Indexed).