## **Faculty Profile**

## Dr.N Karthik,

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**Teaching Experience** : 13.8 years

**Industrial Experience** : 5.2 years

**Research area**: Smart Grid

## **Recent Publications:**

- 1. Published a book chapter titled "A New Heuristic algorithm for Economic Load Dispatch incorporating wind power" in Springer Advances in Intelligent Systems and Computing, Jan 2022. (WOS Indexed).
- 2. Published a Paper titled "Multi-objective optimal power flow using a new heuristic optimization algorithm with the incorporation of renewable energy sources" in International Journal of Energy and Environmental Engineering, June 2021 (SCOPUS/WOS/ESCI Indexed; SJR Rank: Q2).
- 3. Published a paper titled "Multi-Objective Optimal Reactive Power Dispatch using Levy Interior Search Algorithm" in International Journal of Electrical Engineering and Informatics, 2020 (SCOPUS Indexed, SJR Rank: Q2).
- 4. Published a review paper titled "A review of optimal operation of microgrids" in International Journal of Electrical and Computer Engineering, 2020 (SCOPUS Indexed, SJR Rank: Q2).
- 5. Published a paper titled "Multi-objective economic emission dispatch using Interior Search Algorithm" in International Transactions on Electrical Energy Systems, 2019,

- John Wiley & Sons (Impact Factor: 1.692, SCOPUS/WOS/SCI Indexed, SJR Rank: Q2)
- 6. Published a paper titled "Chaotic self-adaptive interior search algorithm to solve combined economic emission dispatch problems with security constraints" in International Transactions on Electrical Energy Systems, 2019, John Wiley & Sons (Impact Factor: 1.692, SCOPUS/WOS/SCI Indexed, SJR Rank: Q2)
- 7. Published a review paper titled "A review of optimization techniques applied to solve unit commitment problem in microgrid", in Indonesian Journal of Electrical Engineering and Computer Science, 2019 (SCOPUS Indexed, SJR Rank: Q3).
- 8. Published a Book Chapter titled "Levy Interior Search Algorithm based Multiobjective Optimal Reactive Power Dispatch for Voltage Stability Enhancement" in Springer Lecture Notes in Electrical Engineering (LNEE), 2021. (SCOPUS/WOS Indexed; SJR Rank: Q3).
- Presented a paper titled "Economic load dispatch in a microgrid using Interior Search Algorithm," Proceedings of IEEE International Conference on Innovations in Power and Advanced Computing Technologies, 2019, Vellore Institute of Technology, Vellore. (Scopus/WOS Indexed)
- 10. Published a paper titled "Intelligent information passing about road transport using GSM and GPS", International Journal of Systems, Control and Communications, 2018 (SCOPUS Indexed, SJR Rank: Q4)
- 11. Presented a paper titled "Controlling of voltage sag in AC distribution system by using fuzzy logic controller", IEEE International Conference on Power, Control, Signals and Instrumentation Engineering, ICPCSI 2017 (Scopus/WOS Indexed)
- 12. Published a paper titled "Non-Convex economic load dispatch using Cuckoo search algorithm" in Indonesian Journal of Electrical Engineering and Computer Science, 2017(SCOPUS Indexed, SJR Rank: Q3).

## DETAILS OF PATENT APPLIED/PUBLISHED/GRANTED

❖ Title of Invention: Chaotic Self-Adaptive Interior Search Algorithm to solve complex power system economics and emission problems

Application No: 202141006789 A

Publication Date: 26.02.2021

\* Title of Invention: Employment and Skill Gap Identification Technique using

Machine Learning for ITEES Sector

Application No: 2021100597

Date of application: 30.01.2021

Date of Grant: 30.03.2021

\* Title of Invention: Secure Device to Device Connectivity Mechanism for IoT Smart

**City Applications** 

Date of application: 20.03.2021

Application No: 2021101443

Date of Grant: 28.04.2021