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CV

1. **Name:** Dr. Dipayan Guha
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5. **Subjects of Interests/Specialization:** Optimization Techniques, Nonlinear Controller, Model Order Reduction, Power System Operation and Control

Academic Qualifications:

Degree	University	Subject/Specialization	Percentage of marks/grade	Year
B. Tech	West Bengal University of Technology	Electrical Engineering	81%	2009
M. Tech	West Bengal University of Technology	Control System	87%	2013
Ph. D	NIT Durgapur, West Bengal	Application of robust and optimized control system to power system	NA	2017

Professional Career:

Position	Institution	Year
Assistant Professor	MNNIT, Allahabad	April 19, 2018 to till date
Assistant Professor	Dr. B.C.Roy Engineering College, Durgapur, WB	August 27, 2014 to April 17, 2018
Assistant Professor	Techno India Durgapur	March 1, 2013 to August 22, 2014

Award/ Prize/ Certificate etc.:

Gold Medal from ‘Maulana Abul Kalam Azad University of Technology’, West Bengal for ranking 1st position in M.Tech (EE).

Book Chapter:

1. **D. Guha**, P.K. Roy, and S. Banerjee, *Robust optimization algorithms for solving automatic generation control of multi-constrained power system*, Handbook of Research on Power and Energy System Optimization, **IGI-Global, Chapter 3**, March, 2018 (in press).

Paper published in International Journals:

1. **D. Guha**, P.K. Roy, and S. Banerjee, *Load frequency control of interconnected power system using grey wolf optimization*, Swarm and Evolutionary Computation, **Elsevier (SCI)**, Vol. 27, April 2016, pp. 97-115.
2. **D. Guha**, P.K. Roy, and S. Banerjee, *Quasi-oppositional symbiotic organism search algorithm applied to load frequency control*, Swarm and Evolutionary Computation, **Elsevier (SCI)**, Vol. 33, April 2017, pp. 46-67.
3. **D. Guha**, P.K. Roy, and S. Banerjee, *Study of Differential Search Algorithm based Automatic Generation Control of an Interconnected Thermal-Thermal System with Governor Dead Band*, Applied Soft Computing, **Elsevier (SCI)**, Vol. 52, March 2017, pp. 160-75.
4. **D. Guha**, P.K. Roy, and S. Banerjee, *Multi Verse Optimization: a novel method for solution of load frequency control problem in power system*, IET Generation, Transmission and Distribution, **IET (SCI)**, Vol. 11(4), 2017, pp. 3601-3611.
5. **D. Guha**, P.K. Roy, and S. Banerjee, *Binary bat algorithm applied to solve MISO type PID-SSSC based load frequency control problem*, Iranian Journal of Science and Technology, Transactions of Electrical Engineering, **Springer (SCI) (in press)**
6. **D. Guha**, P.K. Roy, and S. Banerjee, *Symbiotic Organism Search Algorithm Applied to Load Frequency Control of Multi-area Power System*, Energy System, **Springer (Scopus)**, Vol. 9(2), 2018, pp. 439-468.
7. **D. Guha**, P.K. Roy, and S. Banerjee, *Application of backtracking search algorithm in load frequency control of multi-area interconnected power system*, Ain Shams Engineering Journal, **Elsevier (Scopus)**, 2016. **(in press)**
8. **D. Guha**, P.K. Roy, and S. Banerjee, *Quasi-oppositional differential search algorithm applied to load frequency control*, Engineering Science and Technology, an International Journal, **Elsevier (Scopus)**, Vol. 19, Issue 4, 2016, pp. 1635-54.
9. **D. Guha**, P.K. Roy, and S. Banerjee, *Load frequency control of large scale power system using quasi-oppositional grey wolf optimization algorithm*, Engineering Science and

Technology, an International Journal, *Elsevier (Scopus)*, Vol. 19, Issue 4, 2016, pp. 1693-1713.

10. **D. Guha**, P.K. Roy, and S. Banerjee, *Oppositional biogeography-based optimization applied to SMES and TCSC-based load frequency control with generation rate constraints and time delay*, International Journal of Power and Energy Conversion, *Inderscience (Scopus)*, Vol. 7, Issue 4, 2016, pp. 391-23.
11. **D. Guha**, P.K. Roy, and S. Banerjee, *Solutions of UPFC based Load Frequency Control using Quasi-Oppositional Biogeography Based Optimization Considering Various Nonlinearities of Power System*, International Journal of Power and Energy Conversion, *Inderscience (Scopus)*, Vol. 9, Issue 2, 2018, pp. 105-143.
12. **D. Guha**, P.K. Roy, and S. Banerjee, *Application of Modified Biogeography Based Optimization in AGC of an Interconnected Multi-Unit Multi-Source AC-DC Linked Power System*, International Journal of Energy Optimization and Engineering, *IGI Global*, Vol. 5, Issue 3, 2016, pp. 1-18.
13. **D. Guha**, P.K. Roy, and S. Banerjee, *Grey Wolf Optimization to Solve Load Frequency Control of an Interconnected Power System*, International Journal of Energy Optimization and Engineering, *IGI Global*, Vol. 5, Issue 4, 2016, pp. 62-83.

Paper published in International Conferences:

1. S. Alam, A. Singh, and **D. Guha**, *Optimal solutions of load frequency control problem using oppositional krill herd algorithm*, Proc. of Control, Measurement and Instrumentation (CMI 2016), **IEEE** Conference, Jadavpur University, Kolkata, West Bengal, India, 8th-10th January, 2016, pp. 6-10.
2. **D. Guha**, P.K. Roy, and S. Banerjee, *Blended biogeography based optimization based LFC controller applied to multi-unit multi-source interconnected power system*, Proc. of Michael Faraday IET International Summit 2015, **IET Conference**, Kolkata, 12-13 September, 2015, pp.143-146.
3. **D. Guha**, P.K. Roy, and S. Banerjee, *Differential Biogeography Based Optimization applied to Load Frequency Control problem*, Proc. of C2E2-2016, **Taylor & Francis**, Supreme Knowledge Foundation Group of Institutions, Hooghly, India, 15-16 January 2016, pp. 69-73.
4. **D. Guha**, P.K. Roy, and S. Banerjee, *Application of krill herd algorithm for optimum design of load frequency controller for multi-area power system network with generation rate constraint*, Proc. of FICTA-2015, **Springer**, 16-18 November 2015, National Institute of Technology, Durgapur, Vol. 404, pp 245-257.

5. **D. Guha**, P.K. Roy, and S. Banerjee, *Optimal Design of Superconducting Magnetic Energy Storage Based Multi-Area Hydro-Thermal System Using Biogeography Based Optimization*, Proc. of **IEEE International Conference** on EAIT-2014, 19th-21st December 2014, Indian Statistical Institute, Kolkata, pp. 52 - 57.
6. **D. Guha**, P.K. Roy, and S. Banerjee, *Study of Dynamic Responses of an Interconnected Two-Area all Thermal Power System with Governor and Boiler Nonlinearities using BBO*, Proc. of **IEEE International Conference** on C3IT-2015, Academy of Technology, Hooghly, India, 7-8 February 2015, pp. 1-6.
7. **D. Guha**, P.K. Roy, and S. Banerjee, *Ant Lion Optimization: a novel algorithm applied to Load Frequency Control Problem in Power System*, Proc. of FOTA-2016, **Springer**, Heritage Institute of Technology, Kolkata, 24-26 November 2016.
8. **D. Guha**, P.K. Roy, and S. Banerjee, *Symbiotic Organism Search Based Load Frequency Control with TCSC*, Accepted in the Proc. of 4th **IEEE International Conference** on Recent Advances In Information Technology (RAIT 2018), IIT (ISM) Dhanbad, 15-17 March 2018.