

# Publication List

## 1 Journal Papers

1. **Ashok Krishnan**, L. P. M. I. Sampath, Y. S. Foo Eddy, and H. B. Gooi, "Optimal Scheduling of a Microgrid Including Pump Scheduling and Network Constraints," in *Complexity*, vol. 2018, Article ID 9842025, 20 pages, 2018. doi: 10.1155/2018/9842025.
2. **Ashok Krishnan**, Y. S. Foo Eddy, H. B. Gooi, M. Q. Wang, and P. H. Cheah, "Optimal Load Management in a Shipyard Drydock," in *IEEE Transactions on Industrial Informatics*. doi: 10.1109/TII.2018.2877703.
3. K. S. Chaudhari, N. K. Kandasamy, **Ashok Krishnan**, A. Ukil and H. B. Gooi, "Agent Based Aggregated Behavior Modelling For Electric Vehicle Charging Load," in *IEEE Transactions on Industrial Informatics*. doi: 10.1109/TII.2018.2823321
4. Bhagyesh V. Patil, L. P. M. I. Sampath, **Ashok Krishnan**, Jan Maciejowski, K. V. Ling, and H. B. Gooi, "Experiments with hybrid Bernstein global optimization algorithm for the OPF problem in power systems," in *Engineering Optimization*. doi: 10.1080/0305215X.2018.1521399.
5. Bhagyesh V. Patil, L. P. M. I. Sampath, **Ashok Krishnan**, and Foo Y. S. Eddy, "Decentralized nonlinear model predictive control of a multimachine power system," in *International Journal of Electrical Power & Energy Systems*, vol. 106, pp. 358-372, March 2019.
6. **Ashok Krishnan**, Bhagyesh V. Patil, and Foo Y. S. Eddy, "Optimal Scheduling of Multi-Energy Systems with Flexible Electrical and Thermal Loads," in *Applied Energy* (Under review).
7. L. P. M. I. Sampath, **Ashok Krishnan**, Foo Y. S. Eddy, and H. B. Gooi, "Robust Optimal Energy and Reserve Management of Multiple-Microgrids via Cooperative Bidding," in *IEEE Transactions on Smart Grid* (Under review).
8. Bhagyesh V. Patil, **Ashok Krishnan**, Foo Y. S. Eddy, "The Bernstein polynomials based globally optimal nonlinear model predictive control," in *Journal of Process Control* (Under review).

9. P. K. Ray, S. R. Paital, Asit Mohanty, Foo Y. S. Eddy, **Ashok Krishnan**, H. B. Gooi, and G. A. J. Amaratunga, "A Hybrid Firefly-Swarm Optimized Fractional Order Interval Type-2 Fuzzy PID-PSS for Transient Stability Improvement," in *IEEE Transactions on Industry Applications* (Under review).
10. **Ashok Krishnan**, L. P. M. I. Sampath, Zhang Xinan, Foo Y. S. Eddy, and H. B. Gooi, "Robust Optimal Scheduling of Multi-Energy Systems in Industrial Park Microgrids," in *IEEE Transactions on Smart Grid* (In preparation).

## 2 Conference Papers

1. **Ashok Krishnan**, B. V. Patil, H. B. Gooi, and K. V. Ling, "Predictive control based framework for optimal scheduling of combined cycle gas turbines," *2016 American Control Conference (ACC)*, Boston, MA, 2016, pp. 6066-6072.
2. **Ashok Krishnan**, B. V. Patil, P. S. V. Nataraj, Jan Maciejowski, and K. V. Ling, "Model predictive control of a CSTR: A comparative study among linear and nonlinear model approaches," *2017 Indian Control Conference (ICC)*, Guwahati, 2017, pp. 182-187.
3. **Ashok Krishnan**, Foo Y.S. Eddy, and B. V. Patil, "Hybrid Model Predictive Control Framework for the Thermal Unit Commitment Problem including Start-up and Shutdown Power Trajectories," *IFAC-PapersOnLine*, Volume 50, Issue 1, pp. 9329-9335, 2017. 20th IFAC World Congress, Toulouse, France.
4. **Ashok Krishnan**, L. P. M. I. Sampath, Foo Y. S. Eddy, B. V. Patil, and H. B. Gooi, "Multi-energy scheduling using a hybrid systems approach," *IFAC PapersOnLine*, vol. 51, no. 16, pp. 229-234, 2018. 6th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2018.
5. B. V. Patil, L. P. M. I. Sampath, **Ashok Krishnan**, K. V. Ling, and H. B. Gooi "Examining the Bernstein global optimization approach to optimal power flow problem," *AIP Conference Proceedings*. Eds. Yaroslav D. Sergeyev, et al. Vol. 1776. No. 1. AIP Publishing, 2016.
6. L. P. M. I. Sampath, **Ashok Krishnan**, K. Chaudhari, H. B. Gooi, and A. Ukil, "A control architecture for optimal power sharing among interconnected microgrids," *2017 IEEE Power & Energy Society General Meeting*, Chicago, IL, 2017, pp. 1-5.
7. B. V. Patil, L. P. M. I. Sampath, B. K. Ranjan, **Ashok Krishnan**, and Y. S. F. Eddy, "Bernstein global optimization approach for distributed

- optimal power flow problem incorporating emission costs,” *2017 International Conference on Technological Advancements in Power and Energy (TAP Energy)*, Kollam, 2017, pp. 1-6.
8. P. K. Ray, Gourab Karmakar, F. Y. S. Eddy, **Ashok Krishnan**, and H. B. Gooi, “Dual Tree Complex Wavelet Transform based Detection of Power Quality Disturbances,” *2018 IEEE Innovative Smart Grid Technologies - Asia (ISGT Asia)*, Singapore, 2018, pp. 1177-1182.
  9. P. K. Ray, S. R. Das, Asit Mohanty, F. Y. S. Eddy, **Ashok Krishnan**, H. B. Gooi, and G. A. J. Amaratunga, “Improvement in power quality using hybrid power filters based on robust extended Kalman filter,” *2018 19th International Carpathian Control Conference (ICCC)*, Szilvasvarad, 2018, pp. 585-590.
  10. P. K. Ray, S. R. Paital, Asit Mohanty, F. Y. S. Eddy, **Ashok Krishnan**, H. B. Gooi, and G. A. J. Amaratunga, “Firefly algorithm scaled fractional order fuzzy PID based PSS for transient stability improvement,” *2018 19th International Carpathian Control Conference (ICCC)*, Szilvasvarad, 2018, pp. 428-433.
  11. P. K. Ray, Y. S. Foo Eddy, **Ashok Krishnan**, H. C. Dubey, H. B. Gooi, and G. A. J. Amaratunga, “Wavelet Transform-Spectral Kurtosis Based Hybrid Technique for Disturbance Detection in a Microgrid,” *2018 IEEE Power & Energy Society General Meeting*, Portland, OR, 2018 (Accepted).
  12. Lim Liang Yuan, **Ashok Krishnan**, and Foo Y. S. Eddy, “Design of a Droop Control Scheme for Programmable Sources in a Microgrid Testbed,” *2018 IFAC Symposium on Control of Power and Energy Systems*, Tokyo, 2018 (Accepted).
  13. Prakash K. Ray, **Ashok Krishnan**, Kalpesh Chaudhari, Md Shafquat Ullah Khan, and Foo Y. S. Eddy, “Identifying Microgrid Disturbances Using Independent Component Analysis,” *IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society*, Washington DC, 2018 (Accepted).