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Education:

2003 B.E (Electrical Engineering) Assam Engineering College, Guwahati
2012 M.E.(Electrical Engineering) Jadavpur University, Kolkata
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Area of Interest: Power System Control and Operation, Soft computing application in power system, Modelling of Energy Storage Device, Renewable Source.

PATENTS:

Australian Patent- "Title: Isolated Power System and Method Consisting CCGT and DSTS Plant for Frequency and Voltage Control" (Patent number: 2021104488) in 2021.

International Journals:

- [1] B. Dekaraja and L. C. Saikia, "Impact of RFB and PLL Dynamic on combined ALFC-AVR regulation of Multiarea multisource system under deregulated environment with AC/accurate HVDC link," *IETE Journal of Research*, pp. 1–25, 2022. (SCIE)
- [2] B. Dekaraja and L. C. Saikia, "Impact of electric vehicles and realistic dish-stirling solar thermal system on combined voltage and frequency regulation of multiarea hydrothermal system," *Energy Storage*, 2022. (ESCIE)
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- [5] B. Dekaraja and L. C. Saikia, "Coordinated control of ALFC-AVR in Multiarea multisource systems integrated with VRFB and TCPS using CFPDN-PIDN controller," *IETE Journal of Research*, pp. 1–17, 2022. (SCIE)
- [6] B. Dekaraja and L. C. Saikia, "Performance of redox flow battery in combined frequency and voltage control of multi-area multi-source system using CFOPDN-FOPIDN controller," *International Transactions on Electrical Energy Systems*, vol. 31, no. 3, 2021. (SCIE)

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International Conferences:

- [1] B. Dekaraja, L. C. Saikia, S. K. Ramoji, M. K. Behera, and S. K. Bhagat, "Impact of RFB and HVDC link on combined ALFC-AVR studies of a GTPP integrated hydro-thermal systems using a Cascade Fuzzy PD-Tid Controller," *2022 4th International Conference on Energy, Power and Environment (ICEPE)*, 2022.
- [2] B. Dekaraja, M. Baruah, and L. C. Saikia, "Impact of RFB and HVDC link on AGC of multiarea diverse source system under restructured environment," *2022 IEEE Delhi Section Conference (DELCON)*, 2022.
- [3] S. K. Ramoji, L. C. Saikia, B. Dekaraja, M. K. Behera and S. K. Bhagat, "Performance Comparison of Various Tilt Controllers in Coalesced Voltage and Frequency Regulation of Multi-Area Multi-Unit Power System," *2022 IEEE Delhi Section Conference (DELCON)*, 2022, pp. 1-7, doi: 10.1109/DELCON54057.2022.9752811.
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- [12] S. K. Ramoji, L. Chandra Saikia, B. Dekaraja, M. K. Behera and S. Kumar Bhagat, "Repercussions of SMES and HVDC Link in Amalgamated Voltage and Frequency Regulation of Multi-Area Multi-unit Interconnected Power System," *2022 4th International Conference on Energy, Power and Environment (ICEPE)*, 2022, pp. 1-6, doi: 10.1109/ICEPE55035.2022.9798113.
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Book Chapters:

- [1] B. Dekaraja, L. C. Saikia, and N. R. Babu, "Redox flow battery support for combined ALFC-AVR control of multiarea thermal system incorporating renewable energy sources," *Algorithms for Intelligent Systems*, pp. 97–110, 2022.
- [2] B. Dekaraja, L. C. Saikia, S. K. Ramoji, N. R. Babu, S. K. Bhagat, and M. K. Behera, "Modeling and simulation of a multi-area hydro-thermal interconnected system using fopim controller for integrated voltage and Frequency Control," *Modeling, Simulation and Optimization*, pp. 275–285, 2021.
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- [9] M. K. Behera, L. C. Saikia, S. K. Ramoji, B. Dekaraja, A. Saha, S. K. Bhagat, and N. R. Babu, "A QSSA optimized fractional-order controller for improving transient response in AC autonomous microgrid VSC System," *Advances in Smart Energy Systems*, pp. 255–275, 2022.
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