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AREA OF RESEARCH

Energy Management System for Smart Distribution Systems such as Smart Buildings and Smart Homes, Power System Cyber-Security, Power System State Estimation, Optimal Scheduling of loads and Resources, Machine Learning Application in Power System Cyber-Attacks.

EDUCATION

2017 – 2022 **Indian Institute of Technology (BHU), Varanasi**, Ph.D., Power System Engineering , Electrical Engineering.
Thesis title: *Resilient Scheduling of Smart Buildings under False Data Injection Attack.*

2013 – 2015 **National Institute of Technology, Silchar, Assam**, M.Tech, Power and Energy System Engineering, Electrical Engineering.
Thesis title: *Design and Implementation of Single Phase Pure Sine Wave Inverter for Photovoltaic Application*.

2006 – 2010 **Ajay Binay Institute of Technology, Cuttack, BPUT, Odisha**, B.Tech, Electrical Engineering.

2004 – 2006 **Bhadrak Junior College, Bhadrak, Odisha**, +2 Science.

2004 **Bandhagaon High School Bandhagaon, Bhadrak, Odisha**, Metric.

EXPERIENCE

2022-2023 **Research Associate:** Indian Institute of Technology, Varanasi, UP.

2015-2017 **Assistant Professor (consolidated):** Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha
.

2022-2023 **Lecturer:** Hi-Tech Institute of Engineering and Management, Ranital, Bhadrak, Odisha

COURSES TAUGHT

U.G.

Basic Electrical Engineering, Circuits and Network Theory, Transmission and Distribution System, Digital Electronics Circuit.

PUBLICATIONS

Journals

1. **Sethi, B. K**., Singh, A., Mohanty, S. R., Singh, D., & Misra, R. K. (2022). Game Theoretic Smart Residential Buildings Energy Management System Under False Data Injection Attack. *IEEE Internet of Things Journal*, *10*(1), 110-119.

2. **Sethi, B. K**., Mukherjee, D., Singh, D., Misra, R. K., & Mohanty, S. (2020). Smart home energy management system under false data injection attack. *International Transactions on Electrical Energy Systems*, *30*(7), e12411.

3. **Sethi, B. K.**, Singh, A., Singh, D., & Misra, R. (2021). Optimal energy management of smart

buildings under cyber attack. *International Journal of Energy Research*, *45*(14), 19895-19908.

4. Singh, A., **Sethi, B. K**., Singh, D., & Misra, R. K. (2021). Shapley value method and stochastic Dantzig–Wolfe decomposition for decentralized scheduling of multimicrogrid. *IEEE Systems Journal*, *16*(2), 2672-2683.

5. Singh, A., **Sethi, B. K**., Kumar, A., Singh, D., & Misra, R. K. (2022). Three-level hierarchical management of active distribution system with multimicrogrid. *IEEE Systems Journal*, *17*(1), 605-616.

Conferences

1. Mukherjee, D., Sethi, B. K., Chakraborty, S., Banerjee, R., Guchhait, P. K., & Bhunia, J. (2021, September). Real-time mitigation of effects of false data in smart grid: A data diode approach. In *2021 IEEE 9th Region 10 Humanitarian Technology Conference (R10-HTC)* (pp. 1-6). IEEE

REVIEWER

- IEEE Transactions on Industrial Informatics.
- Springer-Electrical Engineering.

HONOURS AND AWARDS

- MHRD Scholarship -Govt. of India for Ph.D. and M.Tech. studies.

PROFESSIONAL AFFILIATION

- Member of IEEE.
- IEEE Power & Energy Society .

References

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