Pranay Kumar Saha
Research Fellow (NUS)

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Experience

13-Jun-2022 – Present, National University of Singapore
Research Fellow, under project: AIoT-Enabled Smart Grid Applications For Sustainable And Resilient Digital Ports In Singapore (ASGARD Project)

Education

2016 - 2022, Indian Institute of Technology Patna
PhD(Visvesvaraya Research Fellow) in Computer Science & Engineering
Supervisor: Dr. Arijit Mondal & Dr. Samrat Mondal

2014 - 2016, Indian Institute of Technology (Indian School of Mines) Dhanbad
M.Tech in Computer Science & Engineering
Supervisor: Dr. Hari Om

2009-2013, Kalinga Institute Industrial of Technology Bhubaneswar
B.Tech in Computer Science & Engineering

Publications

Journal

- **Pranay Kumar Saha**, Nilotpal Chakraborty, Arijit Mondal, and Samrat Mondal, "Optimal Sizing and Efficient Routing of Electric Vehicles for a Vehicle-On-Demand System," *IEEE Transactions on Industrial Informatics*, vol. 18, no. 3, pp. 1489-1499, March 2022,
DOI: 10.1109/TII.2021.3091597,(IF: 11.648)
- **Pranay Kumar Saha** and Arijit Mondal, "Efficient Online Heuristic Approach for Handling Fluctuation in Renewable Energy in a Microgrid," *IEEE Systems Journal*, vol. 16, no. 2, pp. 2471-2482, June 2022,
DOI: 10.1109/JSYST.2021.3061453. (IF: 4.802)
- Prajnamaya Dass, **Pranay Kumar Saha**, and Hari Om, " Improved Traceable-Resistant Efficient Authentication Schemes for Wireless Networks," *Int. J. Bus. Data Commun. Netw.*, vol. 12, no. 2, pp. 28-61, 2016, DOI: 10.4018/IJBDCN.2016070103

Conferences

- Ritam Sarkar, **Pranay Kumar Saha,** Samrat Mondal, and Arijit Mondal, "Intelligent Scheduling of V2G, V2V, G2V Operations in a Smart Microgrid", *In Proceedings of the Eleventh ACM International Conference on Future Energy Systems (e-Energy '20)*. Association for Computing Machinery, New York, NY, USA, 417–418, 2020.
- **Pranay Kumar Saha**, Nilotpal Chakraborty, Arijit Mondal, Samrat Mondal, "Coordinated Scheduling of Residential Appliances and Heterogeneous Energy Sources in a Smart Microgrid," *BuildSys 2019*, NY, USA, pp. 362–363. DOI:10.1145/3360322.336100

Awards

2018, 1st *prize on project*, IGCS Winter School on Smart Grid, IIT Madras
Awarded to the student group that was a part of the Rural Electrification project.

2016, *Visvesvaraya Fellowship*
Awarded from Ministry of Electronics and Information Technology (MeitY), Government of India, as a PhD research scholar in Indian Institute of Technology Patna.

2014, *GATE Scholarship*
Awarded from AICTE as a postgraduate student in Indian Institute of Technology (Indian School of Mines) Dhanbad

Software Development Skills

Programming
- Python
- C
- Java

Computer Software and Tools
- Openmodelica
- Oracle
- Gurobi Optimizer

References

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