Dr. Sambeet Mishra

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Google Scholar

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Expertise: Power and Energy System, Mathematical Optimization, Machine Learning and Statistics

Work Experience

2015-2019 **RESEARCHER** TTU, Estonia

Electrical Power Engineering

- Power system reliability and adequacy
- Renewable energy resources
- Data Science and Machine Learning applications

2016-2018 **VISITING RESEARCHER (AFFILIATED)** NTNU, Norway

Industrial Economics and Technology Management (IØT)

Center for Sustainable Energy Studies (CenSES)

- Energy Economics
- Mathematical Optimization Modelling
- Industrial business process

2014-2015 **ENGINEER** TTU, Estonia

Electrical Power Engineering

Research Projects

2019-... MIGRATE - Massive Integration of Power Electronic Devices

2015-2019 Flex4RES - Flexibility for Variable Renewable Energy Integration

Effect of new electricity production patterns on high voltage equipment and cables isolation. 2014-2016

2015-2016 Cable networks and their effects on the function of the transmission network

Education

2014-2018 **DOCTORAL STUDIES** Graduation: December 2018

"Models for Modern Power Distribution System Planning"

- Model for classifying wind power variations
- Stochastic MILP formulation for Generation and Transmission Expansion with peer-to-peer market
- Game Theory (coalitions) for expansion price settlements (MCP)
- AC-OPF (MINLP) with Power System reliability indicators through applied machine learning classifiers

Industrial partners:

- TrønderEnergi (Norway)
- LO3 Energy, Brooklyn Microgrid (NewYork, USA)

2011-2013 **MASTER OF TECHNOLOGY** KIIT University

Specialization in Power & Energy system (Distinction) [Two dissertations]

- 1. "Design and simulation of a solar-wind-biogas hybrid system architecture using HOMER in India"
- 2. "Characterization of ohmic contact layer in CdS-Al junction"
 - Techno-economic decision making for rural electrification
 - Quantum energy (Nanotechnology)

BACHELOR OF TECHNOLOGY KIIT University 2006-2010

Electrical Engineering

Electrical Equipment control using C-programming

Publications

- 11 international conference presentations
- 7 peer-reviewed international journals
- *h*-index: 6 [Scopus Author H-index]
- 10 hour(s) Professional development from IEEE Smart Grid

Language Skills

Odia,Hindi, Native Sanskrit

English Professional

IT skills

Python, Julia, GAMS, R, LaTeX, Microsoft Office, MATLAB, AIMMS Operating systems: Windows, Linux (Ubuntu)

Professional Skills

- Power and Energy systems modelling
- Optimal decision making/Operations Research
- Data Science & Machine Learning

Miscellaneous

Interpersonal Skills: Energetic and cheerful, Time management, Diligent & Team player, Calm Hobby: Playing musical instruments