Dr. Sambeet Mishra

Tallinn | Estonia | +372 5890 3996

Google Scholar | www.sambeetmishra.com | /sambeet-mishra

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

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

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)

2006-2010 **BACHELOR OF TECHNOLOGY** *KIIT University*
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

Professional	English
Native	Odia, Hindi, Sanskrit

IT skills

Programming languages	Python, Julia, R, MATLAB, Octave
Algebraic languages	GAMS, AIMMS
Office tools	Microsoft office, LaTeX, Markup
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