# Joel Jose

Research Scholar
Department of Electrical Engineering
IIT Bombay, Powai, Mumbai - 400076

☐ +91 (887) 903 9022 ☑ joeljose@ee.iitb.ac.in

#### Education

July 2019 M. Tech. + Ph.D. (Dual Degree) in Electrical Engineering

(expected) Indian Institute of Technology Bombay, Mumbai, India,

Specialization: Power Electronics and Power Systems

Advisor: Prof. Anupama Kowli

CPI: 9.76/10.00

April 2011 B. Tech. in Electrical and Electronics Engineering

National Institute of Technology Warangal, Warangal, India

CPI: 9.50/10.00

## Experience

#### Research

Nov 2015 - Research Scholar Indian Institute of Technology Bombay, Mumbai, India

present Dynamic Microgrid-based Operations

Dynamic grouping of distributed generation and loads based on system conditions for efficient and economic operation of distribution networks.

2014–2015 Master's Student Indian Institute of Technology Bombay, Mumbai, India

Reliability Constrained Distribution Feeder Reconfiguration

Path-based optimization formulation of distribution feeder reconfiguration for power loss minimization and reliability enhancement.

May 2010 Summer Research Fellow Indian Institute of Science, Bangalore, India

Applications of Wavelet Transforms in Power Engineering

Studied the theory of wavelet transforms and their applications to fault-detection and power system relaying.

#### Teaching and Mentoring

2015–2016 Mentor B. Tech. Project, IIT Bombay Mumbai, India

Mentored Mr. Vaibhav Bhalekar for successful completion of his B. Tech Project under the guidance of Prof. Anupama Kowli on the topic Dynamic Microgrids.

2014-2016 Teaching Assistant, IIT Bombay, Mumbai, India

EE 655: Computer Aided Power System Analysis

EE 334: Power Systems

EE 234: Electrical Machines Laboratory

EE 101: Introduction to Electrical and Electronic Circuits

Professional Experience

2011-2013 **Engineering Officer** *Indian Oil Corporation Limited*, Kozhikode Divisional Office, Kerala Handled more than 250 retail outlets, rolled out retail automation, managed capital expenditure contracts, participated in land selection and construction of new retail outlets, and managed annual maintenance contracts with various original equipment manufacturers.

## Awards and Recognitions

- Best TA Received **Best Teaching Assistant** award from the Department of Electrical Engineering, Indian Institute of Technology Bombay for contributions in revamping the Electrical Machines Laboratory and modernizing the curriculum with new experiments.
- Travel Grant Received Student Travel Grant for the Innovative Smart Grid Technologies Asia Conference (ISGT-Asia 2016).

### **Publications**

- Conference Joel Jose and Anupama Kowli, "Network Expansion for Improved Reliability in Distribution Networks", 2018 IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC), Malaysia, 2018. [Accepted]
- Conference Anupama Kowli, Joel Jose, V. S. Borkar, and T. P. Imthias Ahamed, "A Dynamic Programming Framework for Optimal Home Scheduling", IEEE PES Innovative Smart Grid Technologies Asia Conference (ISGT Asia 2017), Auckland, 2017.
- Conference Joel Jose, Anupama Kowli, Vaibhav Bhalekar, Krishna V. Prasad and Narayanan Rajagopal, "Dynamic Microgrid-based Operations: A New Operational Paradigm for Distribution Networks", IEEE PES Innovative Smart Grid Technologies Asia Conference (ISGT Asia 2016), Melbourne, 2016.
- Conference Joel Jose and Anupama Kowli, "Reliability Constrained Distribution Feeder Reconfiguration for Power Loss Minimization", National Power System Conference (NPSC 2016), Bhubaneswar, 2016.