Aeishwarya Baviskar

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EDUCATION

Technical University of Denmark (DTU)   May. 2020 – Present
Ph.D. Student   Risø, Denmark

Technical University of Munich (TUM)   Oct. 2017 – Nov. 2019
M.Sc. in Power Engineering (GPA: 1.5 | CGPA: 9/10)   Munich, Germany

Visvesvaraya National Institute of Technology (VNIT)   Aug 2012 – May. 2016
B.Tech. in Electrical and Electronics Engineering (CGPA: 8.13/10)   Nagpur, India

EXPERIENCE

Doctoral Student   May. 2020 – Present
Early Stage Researcher in H2020 ITN WinGrid   Risø, Denmark

- Ph.D. Topic: **Wind Power Plant Support for Active Distribution Networks**
- Funding: Marie Sklodowska Curie Fellowship

Visiting Researcher   May. 2022 – July. 2022
Imperial College of London   London, United Kingdom

Visiting Researcher   May. 2021 – Sept. 2021
Former: Dansk Energi | Now: Green Power Denmark   Copenhagen, Denmark

Master's Thesis Student   April. 2019 – Feb. 2020
Siemens AG   Munich, Germany

- Thesis Title: **Parameter Estimation in Li-ion Batteries**
- Developed an optimization algorithm to estimate the parameters including the OCV Vs SOC curve (without experimentation) for Li-ion battery model
- Implemented a capacity estimation algorithm to get a capacity within 2% of deviation from the reference value

Research Intern   Aug. 2018 – Oct. 2018
Fraunhofer Institute for Solar Energy Systems   Freiburg, Germany

- Topic: **Adaptive Control for Power Electronic Converters**
- Found three different approaches for adaptive inverter control through a thorough literature review

Academic Projects

- Developed open-source active distribution model titled, ***'DTU 7k Bus Active Distribution Grid Model'***
- **Analytical modeling and fault analysis in 3×3 phase permanent magnet synchronous machines** | MATLAB
- **Implementation of SPI protocol for Digital to Analog converter on FPGA** | Xilinx Vivado
- **Modeling of 250 W Stand Alone Solar Inverter for Rural Application** | Bachelor's Thesis, MATLAB

SKILLS

Languages : Python, MATLAB, C/C++, VHDL, LaTeX
Libraries : scipy, numpy, pandas, cplex, cxvpy, bokeh plot, pypower, pandapower
Software : MATLAB-Simulink, PSIM, Labview, EMTP-RV, PSSδSINCAL, Microsoft Office

PUBLICATIONS

Journal

A. U. Baviskar, K. Das, M. J. Koivisto and A. D. Hansen, "Multi-Voltage Level Active Distribution Network with Large Share of Weather-Dependent Generation," in IEEE Transactions on Power Systems, doi: 10.1109/TPWRS.2022.3154613.

Under Review

Baviskar, A. U. and Hansen, A. D. and Das, K and Nazir, F. U., Reactive Power Potential of Converter-Connected Renewables Using Convex Power Flow Optimization. Available at SSRN: 10.2139/ssrn.4239650

Conference

Baviskar, A Hansen, A. D. Das, K. (2022). Reactive Power Support from Converter Connected Renewables in Active Distribution Network.

A. Baviskar, A. D. Hansen, K. Das and P. J. Douglass, "Open-Source Active Distribution Grid Model with a large share of RES- features, and studies," 2021 9th IEEE International Conference on Power Systems (ICPS), 2021, pp. 1-6, doi: 10.1109/ICPS52420.2021.9670223.

Baviskar, A.; Das, K.; Hansen, A. D.: 'MINIMIZE DISTRIBUTION NETWORK LOSSES USING WIND POWER', IET Conference Proceedings, , p. 1954-1958, IET Digital Library, doi:10.1049/icp.2021.2143

Baviskar A, Hansen AD, Das K, Koivisto M. Challenges of Future Distribution Systems with a Large Share of Variable Renewable Energy SourcesReview. In 19th Wind Integration Workshop 2020 Available

G. Gurrala, **A. Baviskar** and K. K. Challa, "An Intuitive Approach to Fit A frequency Dependent Equivalent Circuit for Transmission Line Models," 2018 20th National Power Systems Conference (NPSC), 2018, pp. 1-6, doi:10.1109/NPSC.2018.8771794.

Dataset

Baviskar A; Hansen AD,; Das K, Koivisto M, (2021): DTU 7k-Bus Active Distribution Network. Technical University of Denmark. Collection. 10.11583/DTU.c.5389910.v1