

Dr. Prashant Agnihotri

Assistant Professor Department of Electrical Engg. And Computer Science (EECS)

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Areas of Interest

- Application of Power Electronics in Power System and Renewable
- Microgrid Dynamics and Control
- Machine Learning and AI applications in power system

Qualification

- Ph.D. (University of Manitoba, Canada)
- MS (University of North Dakota, USA)
- BE (Rajiv Gandhi Proudhyogiki Vishwavidyala, Bhopal)

Teaching

- Power Electronics
- Application of Power Electronics in Power System and Renewable
- Power Engineering-I
- Microgrid Dynamics and Control

Sponsored Projects

- Deep Learning based Real Time Hardware in Loop Simulation for Islanding Detection and Protection in Microgrid, Sponsoring Agency: MeITY (2020-2023)

Publications

- P. Pandey and P. Agnihotri, "An Efficient LLC Resonant Converter Design for Photovoltaic Application," 2019 8th International Conference on Power Systems (ICPS), Jaipur, India, 2019, pp. 1-6.
- S. Bodda and P. Agnihotri, "Deep Learning based AC Line Fault Classifier and Locator for Power System," 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, India, 2019, pp. 1-5.
- P. Agnihotri, A. M. Kulkarni, A. M. Gole, B. A. Archer and T. Weekes, "A Robust Wide-Area Measurement-Based Damping Controller for Networks With Embedded Multiterminal and Multiinfeed HVDC Links," in IEEE Transactions on Power Systems, vol. 32, no. 5, pp. 3884-3892, Sept. 2017.
- P. Agnihotri, A.M. Kulkarni, A.M. Gole, "Robust Global Control Strategies for Improvement of Angular Stability using FACTS and HVDC Devices", International Journal of Emerging Electric Power Systems, 2013, vol.14, no.1, pp. 95-104.
- N. Kaabouch, Wen-Chen Hu, and P. Agnihotri, "Controlling DC-DC Converters in Portable Devices: A Dynamic FPGA-Based Pulse Shift Modulation Technique," J Elec Electron, vol. 1, no. 3, pp. 1-5, 2012.
- R. Vaid, P. Agnihotri, A.M. Gole, A.M. Kulkarni, X. Chen, "Wide-Area Control of Multi-Infeed HVDC links for Targeted Swing Mode Damping using Special Feedback Signals",

accepted for publication in The 13th IET international conference on AC and DC Power Transmission, Manchester, UK 2017.

- P. Agnihotri, A.M. Kulkarni, A.M. Gole, "Control of Single and Multiple HVDC links embedded in Synchronous Grids using Wide Area Phase Angular Measurements," EPRI Conference on HVDC and FACTS devices, 2013.
- P. Agnihotri, N. Kaabouch, H. Salehfar, Wen-chen Hu, A. Upadhyay, "A novel pulse shift modulation technique for controlling DC-DC converters," Power Electronics, Drives and Energy Systems (PEDES) 2010 Power India, 2010 Joint International Conference on , pp.1-5, 20-23 Dec. 2010.
- P. Agnihotri, N. Kaabouch, H. Salehfar, Wen-chen Hu, "FPGA-based combined PWM-PFM technique to control DC-DC converters," North American Power Symposium (NAPS), 2010, pp.1-6, 26-28 Sept. 2010.
- P. Agnihotri, R. Fazel-Rezai, N. Kaabouch, "Comparative analysis of various brain imaging techniques," Engineering in Medicine and Biology Society (EMBC), 2010 Annual International Conference of the IEEE, pp.3029-3032, Aug. 31 2010-Sept. 2010.