Paper Title: Data-Centric Theories and Singular Value Decomposition (SVD) for Identification of Inverter-Based Resources

Paper ID: 224

Author/Presenter: Shunjie Zhang, PhD Student of Electrical and Computer Engineering, Lehigh University, Bethlehem, PA, U.S.

Bio:

Shunjie Zhang is an Electrical and Computer Engineering doctoral student at Lehigh University, specializing in advanced signal processing for power systems. His current research focuses on enhancing the predictability and performance of power grid systems through data-driven modeling and simulation techniques. He utilizes techniques such as the Kalman Filter and Unscented Kalman Filter to improve the accuracy and reliability of state estimation in dynamic systems. Additionally, he is interested in data-centric approaches to further refine data analysis and model identification, facilitating the development of robust, model-free control strategies for inverter-based resources within smart grids.