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Paper Title : Cycle-Level Capacity Tracking and Trajectory Smoothing for Lithium-Ion Batteries Using an Auto-Regressive ANFIS

Bio :

Dr. Gulcihan Ozdemir (IEEE Senior Member) is an Associate Professor in the Department of Applied Informatics at Istanbul Technical University. She received the B.Sc. degree in electrical engineering from Istanbul Technical University, Istanbul, Turkey, in 1987, the M.Sc. degree in power systems from University of Wisconsin, Madison, USA, in 1996, and worked in ABB Electrical - Electronics Industry, 1996 through 1999. Received the Ph.D. degree in computational science and engineering from Istanbul Technical University in 2012. She was a visiting research scholar at North Carolina State University, NSF FREEDM Systems Center (Future Renewable Electric Energy Delivery and Management Systems Center), Raleigh, USA, in 2014-2015. She was a visiting research associate in Dipartimento di Scienze Informatica - Management & Innovation Systems, Smart Grids and Smart Cities Laboratory, Salerno University, Salerno, Italy, in the Fall of 2022. Her research focuses on modeling, simulation, and optimization, with an emphasis on fuzzy logic and intelligent system applications in power systems, including Volt/VAR optimization, distributed power management, and load forecasting. She also works on image processing and data analysis, employing statistical, artificial intelligence, and machine learning techniques.