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Centre for System Intelligence and Efficiency

You are cordially invited to CSIE Seminar on:

Ensuring AI and Analytics Improve Decarbonised Energy System Management and Operation

Chaired by A/P Xu Yan



Professor Stephen McArthur

Distinguished Professor of Intelligent Energy Systems,
Associate Principal and Executive Dean of Engineering
University of Strathclyde
Glasgow Scotland

Date: 6th December 2022 (Tuesday)

Time: 3:30 pm - 4:00 pm

Venue: [School of EEE, Executive Seminar Room, \(S2.2-B2-53\) \(Map\)](#)

**This event is co-sponsored by [IEEE PES Singapore Chapter](#) and chaired by A/P Xu Yan.
Light refreshment will be provided.**

Abstract: This seminar will describe recent research concerning data analytics and machine learning applied to operational decision making in UK and international energy system context. It will consider how control rooms and operations need to adapt and change, to take account of advances in the diagnosis and prognosis of network and plant events using weather data, power quality data, fault records and online monitoring. It will also describe research to support the trustworthy deployment of these technologies within the energy system.

Speaker: Stephen McArthur is the Distinguished Professor of Intelligent Energy Systems, Associate Principal and Executive Dean of Engineering at the University of Strathclyde. His main area of expertise is AI and intelligent system applications in energy covering smart grids, autonomous systems, condition monitoring and data analytics. His AI-driven decision support research has automated complex energy tasks, and has been deployed to enhance the monitoring, operation and lifetime extension of power systems and nuclear engineering systems. Solutions developed by his team have been deployed for a range of national and international energy companies. He was awarded the 2021 IEEE Richard Harold Kaufmann Award for outstanding contributions in industrial systems engineering, “for innovative contributions to the advancement of intelligent systems for power engineering applications”. He is the Academic Director for Strathclyde’s Advanced Nuclear Research Centre and leads the University’s Industrial Informatics Cluster. He leads the EPSRC Centre for Doctoral Training in Future Power Networks and Smart Grids, an EPSRC Prosperity Partnership on nuclear plant lifetime management and the UKRI EnergyREV consortium focusing on smart local energy systems. He is also the co-founder and CTO of Bellrock Technology, which has developed an AI driven technology for rapidly deploying analytics.