

Webinar Talk on "Industrial Automation Series: AI for Mechanical Engineering"

Organised by: Mechanical Engineering Technical Division, IEM

BEM Approved CPD/PDP Hours: Ref No: Applying



26TH AUGUST 2022 - FRIDAY 2.00PM TO 4.00PM VIA ZOOM VIRTUAL PLATFORM

PRESENTER: Ir. DR SAMI SALAMA HUSSEN HAJJAJ

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REGISTRATION FEES

IEM Students: FOC

IEM Members: RM15 (Online) / RM20 (Offline) Non-IEM Members: RM70

Synopsis

Technology Convergence Technology no longer developed in silos • various fields of tech are merging, with Data being the glue holding them together • there is a need for all-rounder experts who are competent in various fields to cope with Technology convergence. Intro AI How machines learn? • Intro to AI, Neural Networks, ML, DL. A new Design Paradigm - Design ForIoT Developing IoT-ready products. AI Applications in Mech Engineering Complex CAD/CAM systems • Digital Twins - Automated Processes - Data-Driven Systems -Advanced FEA, CFD • Material Modelling • Smart Materials • Advanced Controller algorithms • IoT-Robotics • Remotely monitored Autonomous Systems - System Control - Preventive maintenance -Process Automation • IoT Industrial Robots • Connected Factories • AI in Industrial IoT (IIoT). AI in Mech Engineering, a Case Study Data Collection - Data Preparation - Model Selection - Model Training (Learning) - Model Evaluation & Tuning - Making Predictions (Using learned model to predict complex outcomes)

About the Speaker

Ir Dr Sami Salama Hussen Hajjaj Specializes in areas related to Industrial Automation, industrial Robotics, and Industrial Internet of Things (IIoT), and industrial applications of Artificial Intelligence. He has published books and papers on related topics, he also conducted training sessions, talks, and workshops on related topics. Dr Hajjaj also won several international design innovation awards and registered patents on related projects.

Ir. Dr. Aidil Chee Tahir Chairman Mechanical Engineering Technical Division IEM