



London Digital Twin Annual Workshop (2024) Modelling Digital Twins

Date: Thursday 16th May 2024

Time: 13:00 – 1700

Location: Middlesex University

This half-day event brings leading international researchers in model driven software engineering to showcase research challenges, current research and applications of model driven approaches to Digital Twins. The event is sponsored by a networking grant related to the **Strengthening Global Partnerships: Digital Twinning for Stroke Care in Vietnam and Indonesia**.

The workshop will feature talks followed by a plenary discussion. While there has been significant research progress and focus on physics based digital twins to support use cases such as predictive maintenance, this workshop will aim to progress our understanding and designing of digital twins that have human behaviour aspects. The sessions will be particularly suited to those seeking a broader understanding of digital twins, the representational technologies, and the modelling methods that can be deployed in the design of digital twins. Some specific application areas include DT modelling for policy formulation and modelling for health.

For an overview of digital twins, current state of the art and research challenges, potential attendees are encouraged to do some pre-reading of [Digital twins: A survey on enabling technologies, challenges, trends and future prospects](#) written by members of the LDTRC and available [here](#).

Workshop Schedule:

| | | |
|-------|--|--|
| 12:15 | Arrivals: Light Lunch / Coffee / Tea | |
| 13:00 | Digital Twins: A Case for (Multi-Level) Modeling | Professor Ulrich Frank, University of Duisburg-Essen, Germany |
| 13:40 | Digital Twins for Complex Adaptive System of Systems | Vinay Kulkarni, TCS Fellow, Tata Consultancy Services, Pune, India |
| 14:20 | Digital Twin for Stroke Care: Research Challenges | Prof. Huan Nguyen, Middlesex University |
| 14:30 | Stroke Treatment: In silico Clinical Interventions and Digital Twins | Dr Wahbi K. El Bouri, University of Liverpool |
| 15:00 | Digital Twins: Standards and Model Driven Development | Professor Tony Clark, Aston University, UK |
| 15:30 | Break | |
| 16:00 | The Sociotechnical Digital Twin and Public Policy | Prof. Balbir S Barn, Middlesex University |
| 16:30 | Plenary Session - Discussion | |
| 17:00 | Close | |