

Thur 23 Feb 2023 at 7.30pm
(Tea/Coffee from 7pm)

FREE ENTRY

Venue

**Meadow Suite, Park House,
Whiteknights Campus, RG6 6UR
(Follow signs to Car Park 10)
See [https://www.reading.ac.uk/
about/visit-us.aspx](https://www.reading.ac.uk/about/visit-us.aspx)**

Contact

**Professor Richard Mitchell
r.j.mitchell@reading.ac.uk
EC3 Specialised Section**

Book your place at
<https://localevents.theiet.org/0ead70>

theiet.org/berkshire

#ForThoseWhoDoMore

EC3 Specialised Section

On safety and security requirements for industrial cyber-physical systems

Professor Shuang-Hua Yang, Computer Science, University of Reading

Industrial cyber-physical systems (iCPSs) refer to the next generation of industrial systems that integrate information and physical spaces through control, communication, and computation. iCPSs map industrial processes to the information space through the network, then monitor and control them and make intelligent decisions in real-time. Due to the nature of networked systems, iCPSs are exposed to risks from both physical and information spaces. Safety and security (S&S) are the keys to reducing these risks, but with potential issues of conditional dependence, independence and contradiction.

This talk will introduce such contradictions and a systematic methodology to identify the contradictions in S&S requirements for iCPSs. To provide insight into the operations of the methodology, the talk will demonstrate its application in a smart factory using multiple automatic guided vehicles (AGV).

