INTERNATIONAL SUMMER SCHOOL ON INDUSTRIAL AGENTS: ENGINEERING OF CYBER-PHYSICAL PRODUCTION SYSTEMS

29 June - 3 July 2020
International Manufacturing Centre, WMG, The University of Warwick, UK

Welcome

It is our pleasure to invite you to participate in the 6th International Summer School on Industrial Agents, which will be held at WMG, the University of Warwick from 29th June to 3rd July 2020. The Summer School is technically co-sponsored by the IEEE Technical Committees on Industrial Agents and Automation Systems, Group WMG.

This event is designed to provide advanced training for PhD students and practitioners on engineering methods and automation technologies that will be the basis for Industry 4.0. This week-long intensive course aims to promote discussion on how to use distributed multi-agent systems to design, develop, and implement the next generation of intelligent production systems based on the cross-points of cyber-physical systems.

Objectives

The summer course aims to enhance the participants’ knowledge in the field of distributed and multi-agent systems (MAS) and their application to industrial environments, particularly providing hands-on knowledge to develop industrial cyber-physical systems (e.g. production systems, smart grids, etc.). The main objectives of the course are:

- Introduce MAS principles as a suitable paradigm to develop industrial distributed collaborative systems.
- Provide practical competences in developing MAS applications for industrial automation applications.
- Deployment of agent-based solutions for industrial environments.

Participants will attend lectures and tutorials delivered by well-known experts in the field from Industry and academia to share their experience of developing and applying agent-based solutions in applied industrial context. The summer course will provide a good opportunity to meet prominent researchers, share best practices and to network with participants that may lead to research collaborations in the future. Participants will be able to gain a range of theoretical and practical skills necessary to develop agent-based applications to develop industrial cyber-physical systems.

Methodology and Structure

Well-known international researchers will deliver lectures on cutting-edge research and will share their experience from both the theory and application perspective. In addition to lectures, practical exercises will be provided to deliver hands-on experience to participants. The summer school lasts for 5 days, mainly comprising of 2-hour lectures. Most of the afternoon sessions will be comprised of practical exercises. The summer school promotes a project-based and problem-based learning practice to complement and consolidate the acquired knowledge and hands-on competences.

Keynote Speakers

- Paulo Leitão - Fundamentals in industrial agents
- Luis Ribero - Design and Assessment of Cyber-Physical Production Systems
- Thomas Strasser - Designing Field Level Agents with IEC 61499
- Birgit Vogel - Implementing Field Level Agents with IEC 61499 and Eclipse 4diac

Registration

Please register your interest by dropping an email to the contact provided below. We will send you a notification when more details are available. Your registration is at the moment without any commitment.

Contact:
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For more information please visit our website here.