Prof. Dr. Adel Aneiba

Title: Unleashing the Power of Cyber-Physical Systems: A Glimpse into the
Future of Society

Abstract:

The development of billions of embedded intelligent sensors and actuators has made it feasible to control physical actions and behaviour and create digital representations of the physical environment. These devices are playing a critical role in a large ecosystem. Cyber-physical systems (CPS) play a vital part in this digital representation by developing the necessary infrastructure and technologies to replicate the real world and by adding a futuristic viewpoint for numerous prospective scenarios for diverse application areas. The talk will go through various aspects of this subject such as opportunities, challenges, and use cases. I'll also highlight some technological trends and research directions in this expanding subject.

Bio:

Professor Adel Aneiba is the Head of the College of Computing at Birmingham City University. He is an experienced academic leader with 20 years of service in industry and academia. Prof. Aneiba received his BSc in Computer Science from the University of Benghazi-Libya in 1997 and his MSc and PhD in Computer Networks from Staffordshire University in England in 2003 and 2008 respectively. Prof. Aneiba is the creator of the Cyber-Physical Systems (CPS) research group at Birmingham City University. This group specialises in software-defined networking (SDN), network function virtualization (NFV), high computing performance (HCP), future networks (5G and LPWAN), AI/ML, blockchain, and trustworthy protocols and systems. **Prof. Aneiba** is a member of the research bids reviewers at the EU H2020 evaluation panel for their Digital Innovation Hubs (DIH) federation for large-scale adoption of digital technologies by European SMEs, "DigiFed". He has secured and led several research projects in the area of networking and IoT funded by UKRI worth £1.2M. His research contribution has reached out to and impacted key global challenges such as clean energy and climate change. His CoP26 project was funded by the British Council, Japan sector in partnership with a top global ranking university in Japan (University of Tokyo) and the University of Negeri Gorontalo in Indonesia around Bioenergy using smart sensing technologies and state of the art connectivity and intelligent solutions [5G/IoT/AI/ML].