

Siraj Shaikh

Security for Cyber-Physical Systems: Moving Towards the Vehicles of the Future



Dr. Siraj Ahmed Shaikh is a Reader in Cyber Security at the Faculty of Engineering and Computing at Coventry University. He leads the Digital Security and Forensics (SaFe) Group. He has been involved in research of large-scale distributed secure systems for over twelve years. His doctoral and post-doctoral research involved design and verification of security and safety-critical systems. He has over fifty peer-reviewed research publications. He holds a PhD in Computer Security, MSc in Computer Networking, MA in Higher and Professional Education, and BSc (Honours) in Computing. He is a Chartered Fellow of BCS and also a Chartered Scientist.

Abstract of communication:

Cyber-Physical Systems (CPS) pose a remarkable challenge to security and resilience. One example of such systems are modern vehicles, which are increasingly sophisticated in terms of communication, sensors and actuators all interconnected. Due to the advances in electronic sensors and digital platforms for communication and control, physical security of today provides enhanced capability on the one hand, yet opens up doors for new types of threats on the other. In the case of vehicles, this opens up new attack vectors, which when coordinated across the physical and cyber space serve to be a real challenge for the detection and prevention of attacks. Added to this, are challenges of non-technical factors such as economics, national policy and human factors that serve as an influence. The need to respond to this problem in a manner that is converged across both physical and cyber space hence is greater than ever. This keynote will highlight some of these issues and emphasise on relevant future research directions.


Resilient Trustworthy Cyber-Physical Systems

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Keynote talk

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