

Special Session on

Security and Privacy in 5G Networks

Name and affiliation of organizers:

Vassilios G. Vassilakis University of York vv573@york.ac.uk



Vassilios is a Lecturer in Cyber Security in the Dept. of Computer Science at the University of York, UK. His main research interests are in the areas of security for future mobile networks, internet of things, and software-defined networking. Emmanouil Panaousis University of Brighton e.panaousis@brighton.ac.uk



Emmanouil is a Senior Lecturer of Cyber Security and Privacy at the University of Brighton, UK. His main research interests are in the areas of internet of things security and privacy, cyber security decision making and investments, 5G security, and secure routing.

Siamak F. Shahandashti University of York siamak.shahandashti@york.ac.uk



Siamak is a Lecturer in Cyber Security in the Dept. of Computer Science, University of York, UK. His main research interests are in the areas of applied cryptography, user privacy, biometrics, mobile security, electronic and internet voting, and blockchain technology.

Scope of the session

Future 5G network architectures will be designed to employ a wide range of new and emerging technologies, such as software-defined networking (SDN), network functions virtualization (NFV), and mobile edge computing (MEC). These create new virtual network elements each affecting the logic of the network management and operation, enabling the creation of new generation services with substantially higher data rates and lower delays. However, new security challenges and threats are also introduced. At the same time, novel 5G systems have proffered invaluable opportunities of developing novel solutions for attack prevention, management, and recovery.

Prospective authors are invited to submit original and unpublished work on the following research topics related to this Special Session:

- 5G security architectures
- Core network and radio access network security
- Security in Internet of things (IoT) and machine-to-machine (M2M) communications
- Emerging 5G security and privacy challenges, threats, and vulnerabilities
- User equipment (UE), mobile edge computing (MEC), and cloud computing security
- Location privacy in MEC
- Game theoretic approaches for 5G security
- Security of communication and encryption protocols for 5G networks
- Authentication, authorization, and identity and access control in 5G networks