MAL-IoT20

Malicious Software and Hardware in the Internet of Things

Co-located with ACM International Conference on Computing Frontiers 2020

Catania, Italy, 11 May 2020

Aim and Scope:

Cyber-physical and smart embedded systems, already highly networked, will be even more connected in the near future to form the Internet of Things, handling large amount of private and safety critical data. The pervasive diffusion of these devices will create several threats to privacy and opens new possibilities for adversaries, largely increasing the attack surface. In a setting where a large number of devices operate autonomously and are left unchecked for long periods of time, the possibility of securely updating devices should be guaranteed, and it should be also possible to verify and assert the root of trust of components. With respect to this context we invite contributions in different areas of security and privacy in the Internet of Things. Topics of interest for the workshop include but are not limited to:

- Malicious firmware design and detection
- Malware in Internet of Things applications
- Hardware root of trust
- Privacy issues of smart-home systems and complex systems
- Hardware Trojans and their effects on systems
- Hardware authentication and IP protection
- Secure communication and key management
- Implementation attacks and countermeasures
- Emerging threats and attack vectors in the Internet of Things
- Supply chain security

Prospective authors are invited to submit novel contributions, works in progress, and positional papers (4 to 6 pages for regular papers, 2 pages for extended abstracts, double-column ACM conference format). Submissions must be anonymous with no author names, affiliations, acknowledgments, or obvious references. Computing Frontiers 2020 has obtained the technical sponsorship of the ACM Association for Computing Machinery. All the papers will be published on the ACM Digital Library. At least one author of an accepted paper is required to register for the whole Computing Frontiers 2020 conference.

Workshop Organizers

Paolo Palmieri, University College Cork, Ireland, email: p.palmieri@cs.ucc.ie Francesco Regazzoni, ALaRI - USI, Switzerland, email: regazzoni@alari.ch

More details about MAL-IoT20 and submission instructions can be found at: http://mal-iot2020.alari.ch/ General information about CF20 are available at: http://www.computingfrontiers.org/2020/