

MAL-IoT 2025

Malicious Software and Hardware in the Internet of Things

Co-located with ACM International Conference on Computing Frontiers 2025

Cagliari, Italy, 28 May 2025

Aim and Scope:

Cyber-physical and smart embedded systems, already highly networked, are increasingly connected to form the Internet of Things, handling large amounts of private and safety critical data. The pervasive diffusion of these devices will create several threats to privacy and could open new possibilities for attackers, since the security of even large portions of the Internet of Things could be harmed by compromising a reduced number of components. The possibility of securely updating devices should be guaranteed and it should be 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
- Artificial intelligence techniques for malware detection
- GDPR-compliant hardware and software design

Prospective authors are invited to submit novel contributions, works in progress, and positional papers (4 to 8 pages for regular papers, 2 to 4 pages for extended abstracts, double-column ACM conference format). Page limits include figures, tables and appendices, but exclude references; authors may buy up to two (2) extra pages for accepted regular papers. Submissions must be anonymous with no author names, affiliations, acknowledgments, or obvious references. Computing Frontiers 2025 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 full registration is required from a submission author for each accepted paper and all accepted papers are expected to be presented in person at the conference.

Workshop Organizers:

- Paolo Palmieri, University College Cork (IE)
- Francesco Regazzoni, University of Amsterdam (NL) & Università della Svizzera italiana (CH)

Contact us at: maliot25@easychair.org

More details and submission instructions can be found at: <https://security.ucc.ie/mal-iot2025/>

General information about CF 2025 are available at: <http://www.computingfrontiers.org/>

Important Dates:

Submission of full papers:	February 28, 2025
Notification of acceptance/rejection:	March 24, 2025
Submission of camera-ready papers and registration:	April 7, 2025