# **SPRO 2019**

3<sup>rd</sup> International Workshop on Oftware PROtection



# Call for Papers

# https://spro.aspire-fp7.eu

#### **Scope**

Software Protection techniques aim to defend the confidentiality and integrity of software applications exposed to man-at-the-end (MATE) attacks, performed by a trusted user on a computer system.

MATE attacks can take many forms. In a tampering attack, the user violates the integrity of the code, by modifying it in ways the software vendor didn't intend. In a malicious reverse-engineering attack, he violates the vendor's confidentiality rights by extracting intellectual property from the code; in a cloning attack (software piracy), he violates copyright laws by distributing illegal copies.

# **Topics**

#### 1. Software Protection techniques

- Code Obfuscation, Anti-debugging, Software Diversity
- Data obfuscation, White-Box Cryptography
- Code Virtualization, Software Dynamic Translation
- Software Tampering Detection, Code Guards
- Software Renewability, Remote Attestation
- Software similarity, Plagiarism detection, Legal aspect
- Software Licensing, Watermarking, Fingerprinting, Anticloning
- Homomorphic Encryption, Hardware-Software co-design
- Open-Source tools for software protection

#### 2. Software Protection Evaluation

- Insights on new reverse engineering techniques and their effectiveness against specific protection methods.
- Possible applications of Machine Learning for attacking and improving software protection.
- Evaluation Methodologies: security metrics, risk analysis, and empirical studies
- Resilience, De-obfuscation, Malware analysis
- Tools and their extensions for static and dynamic analysis
- Threat modelling, Petri nets, attack graphs, taxonomies and ontologies
- Decision support systems and security optimization
- Formal Methods for software protection

# 3. Software Protection in Industry

- Protection tool-chains and IDEs
- Software Architectures and build process integration
- -Code and Data Protection in video-games, digital television, and streaming services

- Security Validation and best practices from industry
- Software protection on heterogeneous platforms (sensors, smartphones, cloud)

# **Important dates**

Submission deadline: 30 June 2019
Notification of acceptance: 7 August 2019
Camera-ready papers: 30 August 2019
Workshop date: 15 November 2019

# **Submission Guidelines**

ACM Proceedings of the workshops will be available to the workshop attendees. The submission of must occur through the workshop submission system on:

## https://easychair.org/conferences/?conf=spro2019

Submissions must be at most 12 pages in double-column ACM format including the bibliography and well-marked appendices. Only PDF files will be accepted. Submissions not meeting these guidelines risk rejection without consideration of their merits. Each accepted paper must be presented by an author, who will have to be registered by the registration deadline. For informal queries about the submission contact the workshop chairs.

#### **General Chair**

Paolo Falcarin, University of East London, UK falcarin@uel.ac.uk

# **Program Chair**

Michael Zunke, Thales Group, Munich, Germany michael.zunke@thalesgroup.com

## **Programme Committee**

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