

Fakultät für Informatik und Mathematik
Universität Passau

Einladung

Herr Prof. Dr. Ilia Polian
lädt herzlich
zu folgenden Vorträgen ein:

**Am Donnerstag, 25.06.2015 tragen
im Hörsaal 14, Juridicum,
Innstr. 39, Passau vor:**

Ab 17:00 Uhr:

Frau Jelena Milosevic, PhD Researcher

Vortragstitel:

Early Detection of Mobile Malware

Ab 18:00 Uhr:

Dr. Francesco Regazzoni, Postdoctoral Researcher

Vortragstitel:

Security Challenges at Hardware Design Time for mobile systems

Die Vortragenden sind am Advanced Learning and Research Institute (ALaRI) -
USI, Lugano, Switzerland beschäftigt.

Frau PhD Jelena Milosevic wurde mit Unterstützung durch **das Frauenbüro** der
Universität Passau zum Vortrag eingeladen.

Early Detection of Mobile Malware

(PhD Jelena Milosevic, PhD Researcher)

Existing solutions for malware detection are not effective for mobile devices, as these devices do not have either computational power or sufficient battery to run exhaustive tools. We propose a new approach on malware detection that operates at two levels: a lightweight detector, designed to identify symptoms, runs on the mobile device, a complex and highly accurate detector runs on cloud. Upon identification of symptoms on the device, a specific analysis is triggered on the cloud. In this talk, we present an overview of our approach, and we highlight main challenges related to the definition of representative symptoms of different malware families and the training of the malware detectors. Finally, I will share my experience of being a woman in Electrical Engineering and Computer Science encouraging everyone to become a part of such exciting field that provides us great opportunity for express our creativity and innovativeness.

Security Challenges at Hardware Design Time for mobile systems

(Dr. Francesco Regazzoni, Postdoctoral Researcher)

The pervasive diffusion of embedded devices for sensitive applications, created new challenges for security designers. The problem is even more complex when designers have to deal with mobile devices. On the one side, these devices have a strict power budget, on the other, they are, potentially, in the hand of the attacker.

This talk focuses on the two main security challenges for embedded hardware designers: physical attacks and hardware Trojans. Firstly, attacks where the weaknesses of cryptographic devices is exploited to reveal the secret information stored on them will be introduced, presenting also possible way to counteract this treat. Secondly the concept of hardware Trojans will be detailed, reporting state of the art malicious modification which a designer can apply to a circuit and current methodologies used to detect them.