

Program of the 7th Prague Embedded Systems Workshop

Thursday, June 27

9:00	Registration
10:00	Opening
10:20 (2x 25)	Session 1 - Fault Tolerance & Reliability. Chair: Robert Hülle <i>Ondřej Čekan, Jakub Podivínský, Jakub Lojda, Richard Pánek, Martin Krčma, and Zdeněk Kotásek</i> Smart Electronic Locks and Their Reliability <i>Karel Szurman and Zdeněk Kotásek</i> Fault Recovery for Coarse-Grained TMR Soft-Core Processor Using Partial Reconfiguration and State Synchronization
11:10	Coffee break
11:30	Keynote 1 - Elena-Ioana Vatajelu, TIMA - CNRS / Université Grenoble Alpes Randomness in emerging technologies: Functional robustness vs. security
12:30	Lunch
14:00 (2x 25)	Session 2 - Cryptosystems & Cryptanalysis. Chair: Vojtěch Miškovský <i>Josef Kokeš and Róbert Lórencz</i> Linear cryptanalysis and recovery of key bits in Baby Rijndael <i>Jan Říha, Jakub Klemsa, and Martin Novotný</i> Multiprecision Microcontroller-optimized ANSI C Library for Exotic Cryptosystems
14:50	Coffee break
15:10 (2x 25)	Session 3 – Other. Chair: Karel Szurman <i>Tomasz Czech, Małgorzata Mazurkiewicz, Piotr Mróz, and Anna Pławiak-Mowna</i> Recognition of Semi-trailers on the basis of the image <i>Jakub Podivínský, Ondřej Čekan, Martin Krčma, Radek Burget, Tomáš Hruška, and Zdeněk Kotásek</i> Multidimensional Pareto Frontiers Intersection: Processor Optimization Case Study
16:00	Walking tour to Únětice Brewery Welcome beer

Friday, June 28

9:15	Keynote 2 - Jan Kořenek, BUT, Brno; CESNET Hardware Acceleration Techniques for Network Monitoring and Security
10:00	<i>Jan Bělohoubek</i> Presentation of IEEE YP, introduction to the Student posters session
10:10	Coffee break & student posters
10:45 (3x 25)	Session 4 – Network Monitoring. Chair: Tomáš Čejka <i>Petr Velan</i> The Future of Network Flow Monitoring <i>Karel Hynek, Tomáš Beneš, Tomáš Čejka, and Hana Kubátová</i> Future approaches to monitoring in high-speed backbone networks <i>Jiří Havránek, Tomáš Čejka, and Pavel Benáček</i> L7 capable flow exporter described in P4
12:00	Lunch
13:30 (3x 25)	Session 5 – Traffic Processing and Analysis. Chair: Karel Hynek <i>Lukáš Huták</i> A New Generation of an IPFIX Collector <i>Milan Čermák</i> Trace-Share: Towards Provable Network Traffic Measurement and Analysis <i>Dominik Soukup, Tomáš Čejka, and Simon Stefunko</i> Multi-level Anomaly Detection in IoT Networks
14:45	Coffee break & student posters
15:30 (2x 25)	Session 6 – Security. Chair: Josef Kokeš <i>Jan Bělohoubek and Robert Vík</i> Low-Cost CMOS Power Consumption Data Dependence Demonstrator Concept <i>Stanislav Jeřábek and Jan Schmidt</i> Analysis of the Dummy Rounds Scheme Optimizations
16:20	Student contest results
17:00	Dinner & bowling at the Academic hotel

Saturday, June 29

10:00 (2x 25)	Session 7 - Testing & Test Generation. Chair: Jan Bělohoubek <i>Vishal Gupta, Jimson Mathew, and Marco Ottavi</i> Health Monitoring and Fault Detection Using Memristive Switching Behavior in DSC Array <i>Robert Hülle, Petr Fišer, and Jan Schmidt</i> PBO-Based Fault Selection for Compact Test Generation
10:50	Keynote 3 - Paolo Bernardi, Politecnico di Torino, Italy Automotive testing challenges
11:50	Closing
12:10	Lunch