IARIA

The Sixth International Conference on Performance, Safety and Robustness in Complex Systems and Applications
PESARO 2016
February 21 - 25, 2016 - Lisbon, Portugal
http://www.iaria.org/conferences2016/SPACOMM16.html

Important deadlines:

Submission (full paper)	October 5, 2015
Notification	November 28, 2015
Registration	December 11, 2015
Camera ready	January 11, 2016

Tracks:

Fundamentals

Fundamentals on system safety; Robustness technology and evaluation; Metrics for risk assessment; Performance-oriented design; Safety-oriented system design; Performance metrics and dependable metrics ; Active and passive safety; Performance warning delay

Methodologies, techniques and algorithms

Systems modeling; Hazard analysis; System measurement and monitoring; Evaluation of safety data, and mitigation and prevention strategies; Model verification and validation; Fault-tolerant systems; Simulation, statistical analysis, and experimental design analysis; Language and runtime systems

Performance

Performance basics; Performance-oriented design; Performance methodology techniques and algorithms for analytic modeling; System measurement and monitoring; Model verification and validation, simulation, statistical analysis; Experimental design, and reliability analysis; Performance evaluation of various technologies and systems (mobile devices and wireless networks, distributed and parallel systems, file and storage systems, power management, database systems, computer networks and architectures, operating systems, fault-tolerant systems, and language and runtime systems). Performance in dedicated service systems (Web services, Financial services, Healthcare and pharmaceuticals, Telecommunications services, Industrial Manufacturing, Education services, Transportation services, Energy and utilities)

Safety in industrial systems

Fundamentals on system safety; Safety of software systems and software engineering; Safety requirements; Safety for critical systems; Engineering for system robustness and reliability; Control of mission critical systems; Safety-oriented system design; Human tasks and error models; Hazard analysis; Cost and effectiveness of system safety; Verification and validation of safety; Safety tools; Evaluation of safety data, and mitigation and prevention strategies; Safety control and management; System Safety Implementation Guidelines and Standards; Transferring safety knowledge; Metrics for Risk Assessment; Contingency Planning and Occurrence Reporting; Preparedness Activities; Industry specific safety systems (Medical devices, Aerospace, Chemical industry, Nuclear power plants, Public health, Biological Safety)

Robustness

Basic concepts and applications; Theory and mechanisms for robustness; Uncertainty and robustness; Statistic robustness; Computation and optimization of robustness; Robustness estimation and approximation; Robustness correction; Robust systems; Robustness tests and benchmarking

Systems risks

Identify and weight risks; Risk management systems; Risks in industrial systems; Risks in information-sharing systems; Limits in risks models; Evaluating systems risk (military, economic, judicial, etc.); Knowledge for risk-aware systems; Proactive and reactive alarm processing; Weak signals and bid data; Risks of atmospheric surveillance systems; Risks in health systems; Earthquake systems; Radio-protection and nuclear risks; Risks in avionic and transportation systems; Lessons learned from accidents, crises and false alarms

Applications and services

Mobile Web performance; Multiple data center management; Network latency and impact on performance/robustness; Performance and robustness of cloud-based solutions; Scalable safe and robust solutions; Mobile devices and wireless networks; Mission critical systems and applications; Industry specific safety systems (medical devices, aerospace, chemical industry, nuclear power plants, public health, biological systems)