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Nota di contenuto	Laudatio -- Jan Peleska - the Admirable Expert in Applicable Formal Methods for Safe Industrial Products -- Testing -- On Testing Ethical Autonomous Decision-Making -- Bringing RoboStar and RT-Tester together -- Implementation Relations for Distributed Testing -- Conformance Relations between Input/Output Languages -- On Scenario-Based Testing of Cyber-Physical Systems -- Railway Verification and Safety & Security -- Safety vs. Security { Why Separation of Concerns is a Good Strategy for Safety-Critical Systems -- Decomposing the Verification of Interlocking Systems -- Pattern-based risk identification for model-based risk management -- A Journey through Software Model Checking of Interlocking Programs -- Formal Modelling to Improve Safety and Security -- Intelligent Systems and Cyber-Physical Systems -- Time for Traffic Manoeuvres -- Safer than Perception: Assuring Confidence in Safety-Critical Decisions of Automated Vehicles -- Supervision of Intelligent Systems: An Overview -- Fault Injection in Co-simulation and Digital Twins for Cyber-Physical Robotic Systems -- Towards A Unifying Framework for Uncertainty in

Cyber-Physical Systems -- Tools and Techniques for Specification, Verification and Code Generation -- Source-Code-to-Object-Code Traceability Analysis for Airborne Software: A Case for Tool Support -- Space Telemetry Analysis with PyContract -- An Intermediate Language-based Approach to Implementing and Verifying Communicating UML State Machines -- Polynomial Formal Verification of Complex Circuits using a Hybrid Proof Engine -- Debugging Frame Conditions.

Sommario/riassunto

This Festschrift, dedicated to Jan Peleska on the occasion of his 65th birthday, contains papers written by many of his closest collaborators in academic and industry research. After studying mathematics at the University of Hamburg, Jan worked with Philips and Deutsche System-Technik on fault-tolerant systems, distributed systems, database systems, and safety-critical embedded systems. Since 1994 he has worked as a consultant to industry, specializing in development methods, verification, validation and test of safety-critical systems, and since 1995 he has been a Professor of Computer Science at the University of Bremen. In his research he has been most interested in the combination and application of existing methods and corresponding tools to real-world problems, particularly in the field of safety-critical embedded systems and distributed systems, including avionics and railway control systems. The papers in this volume reflect those interests, and the impact he has had on colleagues and collaborators. The volume is structured into sections on testing; railway verification and safety & security; intelligent systems and cyber-physical systems; and tools and techniques for specification, verification and code generation.