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Nota di contenuto	RV-TheToP: Runtime Verification from the Theory To the industry Practice (Track Introduction) -- Opportunities and Challenges in Monitoring Cyber-physical Systems Security -- Migrating Monitors + ABE: A Suitable Combination for Secure IoT? -- Capturing Inter-Process Communication for Runtime Verification on Android -- Considering

Academia-Industry Projects Meta-Characteristics in Runtime Verification Design -- Flexible Monitor Deployment for Runtime Verification of Large Scale Software -- Increasing the Reusability of Enforcers with Lifecycle Events -- BDDs on the Run -- Verifying Real-World Software with Contracts for Concurrency -- Formal Methods in Industrial Practice - bridging the gap (Track Summary) -- Model-based Testing for Avionic Systems -- Proven Benefits and Further Challenges -- Test Case Generation with PathCrawler/LTest: How to Automate an Industrial Testing Process -- Pitfalls in Applying Model Learning to Industrial Legacy Software -- Formal Verification in Automotive Industry: Enablers and Obstacles -- Scalability of Deductive Verification Depends on Method Call Treatment -- Java Automated Deductive Verification in Practice: Lessons from industrial proof-based projects -- Security Filters for IoT Domain Isolation -- 20 Years of Uppaal Enabled Industrial Model-Based Validation and Beyond -- Verification of Operating System Monolithic Kernels without Extensions -- A Proposal of an Example and Experiments Repository to Foster Industrial Adoption of Formal Methods -- Reliable Smart Contracts: State-of-the-art, Applications, Challenges and Future Directions -- Smart Contracts and Opportunities for Formal Methods -- Contracts over Smart Contracts: Recovering from Violations Dynamically -- Security Analysis of Smart Contracts in Datalog -- Temporal Properties of Smart Contracts -- Temporal Aspects of Smart Contracts for Financial Derivatives -- Marlowe: financial contracts on blockchain -- SMT-based Verification of Solidity Smart Contracts -- Blockchains as Kripke Models: an Analysis of Atomic Cross-Chain Swap -- A Language-Independent Approach To Smart Contract Verification -- Towards Adding Variety to Simplicity -- Fun with Bitcoin smart contracts -- Computing Exact Worst-Case Gas Consumption for Smart Contracts -- Digital Transformation Trends: Industry 4.0, Automation, and AI -- A Methodology for Combinatory Process Synthesis: Process Variability in Clinical Pathways -- Automatic composition of rough solution possibilities in the target planning of factory planning projects by means of combinatory logic -- GOLD: Global Organization aLignment and Decision - Towards the Hierarchical Integration of Heterogeneous Business Models.

Sommario/riassunto

The four-volume set LNCS 11244, 11245, 11246, and 11247 constitutes the refereed proceedings of the 8th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation, ISoLA 2018, held in Limassol, Cyprus, in October/November 2018. The papers presented were carefully reviewed and selected for inclusion in the proceedings. Each volume focusses on an individual topic with topical section headings within the volume: Part I, Modeling: Towards a unified view of modeling and programming; X-by-construction, STRESS 2018. Part II, Verification: A broader view on verification: from static to runtime and back; evaluating tools for software verification; statistical model checking; RERS 2018; doctoral symposium. Part III, Distributed Systems: rigorous engineering of collective adaptive systems; verification and validation of distributed systems; and cyber-physical systems engineering. Part IV, Industrial Practice: runtime verification from the theory to the industry practice; formal methods in industrial practice - bridging the gap; reliable smart contracts: state-of-the-art, applications, challenges and future directions; and industrial day. .
