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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9952
Disciplina	629.89251
Soggetti	Software engineering Computer science Compilers (Computer programs) Machine theory Artificial intelligence Software Engineering Computer Science Logic and Foundations of Programming Compilers and Interpreters Theory of Computation Formal Languages and Automata Theory Artificial Intelligence
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Nota di bibliografia	Includes bibliographic references and index.
Nota di contenuto	Statistical Model Checking: Past, Present and Future -- Hypothesis testing for rare-event simulation: limitations and possibilities -- Survey of Statistical Verification of Linear Unbounded Properties: Model Checking and Distances -- Feedback Control for Statistical Model Checking of Cyber-Physical Systems -- Probabilistic Model Checking of Incomplete Models -- Plasma Lab: A Modular Statistical Model Checking Platform -- Synthesizing Energy-Optimal Controllers for Multiprocessor Dataflow Applications with UPPAAL STRATEGO -- Statistical Model Checking for Product Lines -- Towards Adaptive Scheduling of Maintenance for Cyber-Physical Systems -- Better railway

engineering through statistical model checking -- On Creation and Analysis of Reliability Models by Means of Stochastic Timed Automata and Statistical Model Checking: Principle -- Automatic Synthesis of Code using Genetic Programming -- Evaluation and Reproducibility of Program Analysis and Verification (Track Introduction) -- Symbolic Execution with CEGAR -- Multi-Core Model Checking of Large-Scale Reactive Systems Using Different State Representations -- Sparse Analysis of Variable Path Predicates Based Upon SSA-Form -- A Model Interpreter for Timed Automata -- ModSyn-PP: Modular Synthesis of Programs and Processes: Track Introduction -- Combinatory Process Synthesis -- Synthesis from a Practical Perspective -- A Long and Winding Road Towards Modular Synthesis -- Semantic heterogeneity in the formal development of complex systems: an introduction -- On the Use of Domain and System Knowledge Modeling in Goal-Based Event-B Specifications -- Strengthening MDE and Formal Design Models by references to Domain Ontologies. A Model Annotation Based Approach -- Towards Functional Requirements Analytics -- Heterogeneous Semantics and Unifying Theories -- Static and Runtime Verification: Competitors or Friends? -- StaRVOOrS - Episode II, Strengthen and Distribute the Force -- A Model-Based Approach to Combining Static and Dynamic Verification Techniques -- Information flow analysis for Go -- Challenges in High-Assurance Runtime Verification -- Static versus Dynamic Verification in Why3, Frama-C and SPARK 2014 -- Considering Type-State Verification for Quantified Event Automata -- Combining Static and Runtime Methods to Achieve Safe Standing-Up for Humanoid Robots -- On Combinations of Static and Dynamic Analysis -- Safer Refactorings -- Rigorous Engineering of Collective Adaptive Systems -- Programming of CAS systems by relying on attribute-based communication -- Towards Static Analysis of Policy-Based Self-Adaptive Computing Systems -- A Calculus for Open Ensembles and Their Composition -- Logic Fragments: coordinating entities with logic programs -- Mixed-Critical Systems Design with Coarse-grained Multi-core Interference -- A Library and Scripting Language for Tool Independent Simulation Descriptions -- Adaptation to the unforeseen: Do we master our autonomous systems?'-- Questions to the Panel -- Smart coordination of autonomic component ensembles in the context of ad-hoc communication -- A Tool-chain for Statistical Spatio-Temporal Model Checking of Bike-sharing Systems -- Rigorous graphical modelling of movement in Collective Adaptive Systems -- Integration and Promotion of Autonomy with the ARE Framework -- Safe Artificial Intelligence and Formal Methods -- Engineering Adaptivity, Universal Autonomous Systems, Ethics and Compliance Issues -- Correctness-by-Construction and Post-hoc Verification: Friends or Foes? -- Correctness-by-Construction and Post-hoc Verification: A Marriage of Convenience? -- Deductive Verification of Legacy Code -- Correctness-by-Construction $\land$ Taxonomies $\Rightarrow$\\ Deep Comprehension of Algorithm Families -- Conditions for Compatibility of Components - The case of masters and slaves -- A Logic for Statistical Model Checking of Dynamic Software Architectures -- On two Friends for getting Correct Programs - Automatically Translating Event-B Specifications to Recursive Algorithms in Rodin -- Proof-Carrying Apps: Contract-Based Deployment-Time Verification -- Supervisory Controller Synthesis for Product Lines with CIF3 -- Partial Verification and Intermediate Results as a Solution to Combine Automatic and Interactive Verification Techniques -- Security and Privacy of Protocols and Software with Formal Methods -- A Model-Based Approach to Secure Multiparty Distributed Systems -- Information leakage analysis of complex C code

	and its application to OpenSSL -- Integrated Modeling Workflow for Security Assurance -- A Privacy-Aware Conceptual Model for Handling Personal Data -- Guaranteeing Privacy-observing Data Exchange.
Sommario/riassunto	The two-volume set LNCS 9952 and LNCS 9953 constitutes the refereed proceedings of the 7th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation, ISoLA 2016, held in Imperial, Corfu, Greece, in October 2016. The papers presented in this volume were carefully reviewed and selected for inclusion in the proceedings. Featuring a track introduction to each section, the papers are organized in topical sections named: statistical model checking; evaluation and reproducibility of program analysis and verification; ModSyn-PP: modular synthesis of programs and processes; semantic heterogeneity in the formal development of complex systems; static and runtime verification: competitors or friends?; rigorous engineering of collective adaptive systems; correctness-by-construction and post-hoc verification: friends or foes?; privacy and security issues in information systems; towards a unified view of modeling and programming; formal methods and safety certification: challenges in the railways domain; RVE: runtime verification and enforcement, the (industrial) application perspective; variability modeling for scalable software evolution; detecting and understanding software doping; learning systems: machine-learning in software products and learning-based analysis of software systems; testing the internet of things; doctoral symposium; industrial track; RERS challenge; and STRESS.