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	Nota di contenuto	Invited Papers -- Reasoning about Separation using Abstraction and Reification -- An Interface Theory for the Internet of Things -- Program Verification -- Learning Assertions to Verify Linked-List Programs -- Verifying Protocol Implementations by Augmenting Existing Cryptographic Libraries with Specifications -- Specification and Verification of Atomic Operations in GPGPU Programs -- History-based Verification of Functional Behaviour of Concurrent Programs -- Investigating Instrumentation Techniques for ESB Runtime Verification -- Towards Domain Refinement for UML/OCL Bounded Verification --

Testing -- Efficient Testing of Different Loop Paths -- Model-Based Robustness Testing in Event-B using Mutation -- On the Testability of Properties Patterns -- Certification -- Speed Up Configurable Certificate Validation by Certificate Reduction and Partitioning -- Formal Analysis of Proactive, Distributed Routing -- Certification of Distributed Algorithms Solving Problems with Optimal Substructure -- Formal Specification and Proof -- From Failure to Proof: The ProB Disprover for B and Event-B -- Formalizing a Secure Foreign Function Interface -- A Formal Study of Backward Compatible Dynamic Software Updates -- Testing and Model Checking -- Memory Management Test-Case Generation of C Programs using Bounded Model Checking -- Techniques for Memory-Efficient Model Checking of C and C++ Code -- NAT2TEST Tool: from Natural Language Requirements to Test Cases based on CSP -- Planning -- Task Planning of Cyber-Human Systems -- Generating None-Plans in Order to Find Plans -- Modelling and Model Transformation Twitlang(er): interactions modeling language (and interpreter) for Twitter -- From Featured Transition Systems to Modal Transition Systems with Variability Constraints -- An extensible operational semantics for UML activity diagrams.

| Sommario/riassunto | This book constitutes the refereed proceedings of the 12th International Conference on Software Engineering and Formal Methods, SEFM 2015, held in York, UK, in September 2015. The 17 full papers presented together with 2 invited and 6 short papers were carefully reviewed and selected from 96 submissions. The topics of interest included the following aspects of software engineering and formal methods: program verification, testing, certification, formal specification and proof, testing and model checking, planning, modelling, and model transformation. |