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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12709
Disciplina	004.0151
Soggetti	Machine theory Computer engineering Computer networks Logic programming Application software Compilers (Computer programs) Formal Languages and Automata Theory Computer Engineering and Networks Logic in AI Computer and Information Systems Applications Compilers and Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Regular Research Articles -- Unbounded Barrier-Synchronized Concurrent ASMs for Effective MapReduce Processing on Streams -- Towards ASM-based automated formal verification of security protocols -- Verifying System-level Security of a Smart Ballot Box -- Proving the safety of a Sliding Window Protocol with Event B -- Event-B formalization of Event-B contexts -- Validation of Formal Models by Timed Probabilistic Simulation -- Short Articles -- Sterling: A Web-based Visualizer for Relational Modeling Languages -- Extending ASMETA with time features -- About the Concolic Execution and Symbolic ASM Function Promotion in CASM -- Towards Refinement of

Unbounded Parallelism in ASMs Using Concurrency and Reflection --
The CamilleX Framework for the Rodin Platform -- Extensible Record
Structures in Event-B -- Formalizing and Analyzing System
Requirements of Automatic Train Operation over ETCS using Event-B --
Automatic Transformation of SysML Model to Event-B Model for Railway
CCS Application -- Short Articles of the PhD-Symposium (Work in
Progress) -- Formal Meta Engineering Event-B: Extension and
Reasoning – The EB4EB Framework -- A modeling and verification
framework for security protocols -- Formalizing the Institution for
Event-B in the Coq Proof Assistant.

Sommario/riassunto

This book constitutes the proceedings of the 8th International Conference on Rigorous State-Based Methods, ABZ 2021, which was planned to take place in Ulm, Germany, during June 6-11, 2021. The conference changed to an online format due to the COVID-19 pandemic. The 6 full and 8 short papers included in this volume were carefully reviewed and selected from 18 submissions. The proceedings also include 3 PhD symposium contributions. They deal with state-based and machine-based formal methods, mainly Abstract State Machines (ASM), Alloy, B, TLA+, VDM, and Z. .
