

1. Record Nr.	UNINA9910416079303321
Titolo	Formal Methods for Industrial Critical Systems : 25th International Conference, FMICS 2020, Vienna, Austria, September 2–3, 2020, Proceedings / / edited by Maurice H. ter Beek, Dejan Nikovi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-58298-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (301 pages)
Collana	Programming and Software Engineering, , 2945-9168 ; ; 12327
Disciplina	620.86 005.1
Soggetti	Compilers (Computer programs) Computer science Natural language processing (Computer science) Computers, Special purpose Software engineering Compilers and Interpreters Theory of Computation Natural Language Processing (NLP) Special Purpose and Application-Based Systems Software Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	FMICS 25th Anniversary -- The 2020 Expert Survey on Formal Methods -- Quantitative Analysis and Cyber-Physical Systems -- Verifiable and Scalable Mission-Plan Synthesis for Autonomous Agents -- Skylines for Symbolic Energy Consumption Analysis -- Formally Verified Timing Computation for Non-deterministic Horizontal Turns During Aircraft Collision Avoidance Maneuvers -- An Actor-based Approach for Security Analysis of Cyber-Physical Systems -- Formal Verification of Industrial Systems Scalable Detection of Amplification Timing Anomalies for the Superscalar TriCore Architecture -- A Formally Verified Plasma Vertical Position Control Algorithm -- The First Twenty-Five Years of Industrial Use of the B-Method -- A Safety Flasher Developed with the

CLEARSY Safety Platform -- Temporal Logic and Model checking --  
Formal Verification of OIL Component Specifications Using mCRL2 --  
Temporal-Logic Query Checking over Finite Data Streams --  
Verification of a Failure Management Protocol for Stateful IoT  
Applications.

---

#### Sommario/riassunto

This book constitutes the proceedings of the 25th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2020, which was held during September 2-3, 2020. The conference was planned to take place in Vienna, Austria. Due to the COVID-19 pandemic it changed to a virtual event. The 11 full papers presented in this volume were carefully reviewed and selected from 26 submissions. The papers are organized in topical sections as follows: Quantitative Analysis and Cyber-Physical Systems, Formal Verification of Industrial Systems, Temporal Logic and Model Checking. The book also contains a lengthy report on a Formal Methods Survey conducted on occasion of the 25th edition of the conference.

---