

1. Record Nr.	UNISA996465417803316
Titolo	Reliability, Safety, and Security of Railway Systems. Modelling, Analysis, Verification, and Certification [[electronic resource] ] : Second International Conference, RSSRail 2017, Pistoia, Italy, November 14-16, 2017, Proceedings // edited by Alessandro Fantechi, Thierry Lecomte, Alexander Romanovsky
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-68499-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVIII, 265 p. 80 illus.)
Collana	Programming and Software Engineering ; ; 10598
Disciplina	004
Soggetti	Software engineering Artificial intelligence Computers Computer organization Computer security Microprogramming Software Engineering Artificial Intelligence Theory of Computation Computer Systems Organization and Communication Networks Systems and Data Security Control Structures and Microprogramming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Keynote Talk -- Cyber Security in Railways: Quo vadis? -- Communication Challenges in Railway Systems -- LTE System Design for Urban Light Rail Transport -- A framework to evaluate 5G networks for smart and fail-safe communications in ERTMS/ETCS -- Systems-Theoretic Likelihood and Severity Analysis for Safety and Security Co-Engineering -- Formal Modelling and Verification for Safety -- Formal modelling techniques for efficient development of railway control

products -- OVADO: Enhancing Data Validation for Safety-Critical Railway Systems -- A Domain-Specific Language for Generic Interlocking Models and Their Properties -- Bayesian Network Modeling Applied on Railway Level Crossing Safety -- Deductive Verification of Railway Operations -- Safety Analysis of a CBTC System: A Rigorous Approach with Event-B -- B-PERfect: Applying the PERF approach to B based system developments -- Formal Verification of Train Control with Air Pressure Brakes -- Light Rail and Urban Transit -- An Efficient Evaluation Scheme for KPIs in Regulated Urban Train Systems -- Redundant and Reliable Architecture Based On Open Source Tools for Light-Rail-Transit On-Board-Systems -- Dynamic Routing for Urban Transport Systems Through Integer Linear Programming -- Engineering Techniques and Standards -- Theories, Techniques and Tools for Engineering Heterogeneous Railway Networks -- Are Standards an Ambiguity-free Reference for Product Validation. .

---

Sommario/riassunto

This volume constitutes the proceedings of the Second International Conference on Reliability, Safety and Security of Railway Systems, RRSRail 2017, held in Pistoia, Italy, in November 2017. The 16 papers presented in this volume were carefully reviewed and selected from 34 submissions. They are organized in topical sections named: communication challenges in railway systems; formal modeling and verification for safety; light rail and urban transit; and engineering techniques and standards. The book also contains one keynote talk in full-paper length. .

---