1. Record Nr. UNINA9910744507403321

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Titolo	Computer Safety, Reliability, and Security. SAFECOMP 2023 Workshops : ASSURE, DECSoS, SASSUR, SENSEI, SRToITS, and WAISE, Toulouse, France, September 19, 2023, Proceedings / / edited by Jérémie Guiochet, Stefano Tonetta, Erwin Schoitsch, Matthieu Roy, Friedemann Bitsch
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031409530 3031409531
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (448 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14182
Altri autori (Persone)	TonettaStefano SchoitschErwin RoyMatthieu BitschFriedemann
Disciplina	621.39 004.6
Soggetti	Computer engineering Computer networks Image processing - Digital techniques Computer vision Application software Software engineering Computer science Data protection Computer Engineering and Networks Computer Imaging, Vision, Pattern Recognition and Graphics Computer and Information Systems Applications Software Engineering Theory of Computation Security Services
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto

Using Assurance Cases to Prevent Malicious Behaviour from Targeting Safety Vulnerabilities -- Constructing Security Cases Based on Formal Verification of Security Requirements in Alloy.-Assurance Cases for Timing Properties of Automotive TSN Networks -- Toward Dependability Assurance Framework for Automated Driving Systems -- A Quantitative Approach for System of Systems' Resilience Analyzing Based on Archimate -- Towards DO-178C Compliance of a Secure Product -- The Need for Threat Modelling in Unmanned Aerial Systems -- Using Runtime information of controllers for safe adaptation at runtime: a Process Mining approach -- Safety and Robustness for Deep Neural Networks: An Automotive Use Case -- Towards Dependable Integration Concepts for AI-based Systems -- A Methodology for the Qualification of Operating Systems and Hypervisors for the deployment in IoT devices -- Computer-Aided Generation of Assurance Cases -- RACK: A Semantic Model and Triplestore for Curation of Assurance Case Evidence -- Patterns for Integrating NIST 800-53 Controls into Security Assurance Cases -- Analyzing Origins of Safety and Security Interactions using Feared Events Trees and Multi-level Model -- Utilising Redundancy to Enhance Security of Safety-Critical Systems -- Reliability Evaluation of Autonomous Transportation System Architecture Based on Markov Chain -- Uncertainty Quantification for Semantic Segmentation Models via Evidential Reasoning -- Research on the Reliability of High-Speed Railway Dispatching and Commanding Personnel with Multi Physiological Signals -- Research on Brain Load prediction based on machine learning for High-speed Railway -- Paired Safety Rule Structure for Human-machine Cooperation with Feature Update and Evolution -- Towards an Effective Generation of Functional Scenarios for AVs to Guide Sampling -- Rear-end Collision Risk Analysis for Autonomous Driving -- Improving road traffic safety and performance – barriers and directions towards cooperative automated vehicles -- A Group-Level Learning Approach Using Logistic Regression for Fairer Decisions -- Conformal Prediction and Uncertainty Wrapper: What Statistical Guarantees Can You Get for Uncertainty Quantification in Machine Learning -- AIMOS: Metamorphic Testing of AI - An Industrial Application -- AERoS: Assurance of Emergent Behaviour in Autonomous Robotic Swarms -- A Reasonable Driver Standard for Automated Vehicle Safety -- Structuring Research Related to Dynamic Risk Management for Autonomous Systems -- Towards Safe Machine Learning Lifecycles with ESG Model Cards -- Towards Deep Anomaly Detection with Structured Knowledge Representations -- Evaluating and Increasing Segmentation Robustness in CARLA -- Safety Integrity Levels for Artificial Intelligence -- Can Large Language Models assist in Hazard Analysis -- Contextualised Out-of-Distribution Detection using Pattern Identification. .

Sommario/riassunto

This book constitutes the proceedings of the Workshops held in conjunction with SAFECOMP 2023, held in Toulouse, France, during September 19, 2023. The 35 full papers included in this volume were carefully reviewed and selected from 49 submissions. - 8th International Workshop on Assurance Cases for Software-intensive Systems (ASSURE 2023) - 18th International Workshop on Dependable Smart Embedded and Cyber-Physical Systems and Systems-of-Systems (DECSoS 2023) - 10th International Workshop on Next Generation of System Assurance Approaches for Critical Systems (SASSUR 2023) - Second International Workshop on Security and Safety Interactions (SENSEI 2023) - First International Workshop on Safety/ Reliability/ Trustworthiness of Intelligent Transportation Systems (SRToITS 2023) - 6th International Workshop on Artificial Intelligence Safety Engineering (WAISE 2023) .