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Nota di contenuto	How To Be An Ethical Technologist -- Toward Responsible Artificial Intelligence systems -- Safety and trustworthiness -- Ambient Temperature Prediction for Embedded Systems using Machine Learning -- A Federated Learning Algorithms Development Paradigm -- Machine Learning Data Suitability and Performance Testing Using Fault Injection Testing Framework -- Samuelsson IDPP: Imbalanced Datasets Pipelines in Pyrus -- Learning in Uppaal for Test Case Generation for Cyber-Physical Systems -- A Literature Survey of Assertions in Software Testing -- FPGA-based encryption for peer-to-peer industrial network links -- Formalization and Verification of MQTT-SN Communication Using CSP -- Environments using Acoustic Classification for Sensor Fusion with Radar systems -- Comparative Analysis of UPPAAL SMC, ns-3 and MATLAB/Simulink -- Using Automata Learning for Compliance Evaluation of Communication Protocols on an NFC Handshake Example -- Towards LLM-based System Migration in Language-Driven Engineering -- Synthesizing Understandable Strategies -- ReProInspect: Framework for Reproducible Defect Datasets for Improved AOI of PCBAs -- Cyber-Physical Ecosystems: Modelling and Verification -- Integrating IoT Infrastructures in Industrie 4.0 Scenarios with the Asset Administration Shell -- A Software Package (in progress) that implements the Dynamic Priority

Scheduling for Periodic Systems using ROS 2 -- Continuous Integration of Neural Networks in Autonomous Systems -- Building a Digital Twin Framework for Dynamic and Robust Distributed Systems -- A simple end-to-end computer-aided detection pipeline for trained deep learning models. Case pipeline: Pulmonary embolism detection -- Astrocyte-Integrated Dynamic Function Exchange in Spiking Neural Networks -- Correct orchestration of Federated Learning generic algorithms: formalisation and verification in CSP -- Combining Machine Learning and Virtual Reality to Build an Attractive Job Recommender System for Youth: Technical Details and Experimental Data.

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Sommario/riassunto

This book constitutes the refereed proceedings of the 8th International Conference on Engineering of Computer-Based Systems, ECBS 2023, which was held in Västerås, Sweden, in October 2023. The 11 full papers included in this book were carefully reviewed and selected from 26 submissions and present software, hardware, and communication perspectives of systems engineering through its many facets. The special theme of this year is "Engineering for Responsible AI".

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