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Software engineering
Artificial intelligence
Computer programming
Compilers (Computer programs)
Application software
Software Engineering Artificial Intelligence
Programming Techniques
Compilers and Interpreters
Computer and Information Systems Applications
Inglese
Materiale a stampa
Monografia
STRESS - Introduction An Introduction to Graphical Modeling of CI/CD Workflows with Rig Pyrus: an Online Modeling Environment for No-Code Data-Analytics Service Composition Integrating External Services in DIME Asking Why Formal Methods for a Digital Industry: Industrial Day at ISoLA 2021 Agile Business Engineering: From Transformation Towards Continuous Innovation Towards Living Canvases Use Cases for Simulation in the Development of Automated Driving Systems Simulation-based Elicitation of Accuracy Requirements for the Environmental Perception of Autonomous Vehicles DSLs and Middleware Platforms in a Model-

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Driven Development Approach for Secure Predictive Maintenance Systems in Smart Factories -- From Requirements to Executable Rules: An Ensemble of Domain-Specific Languages for Programming Cyber-Physical Systems in Warehouse Logistics -- Mining Data Quality Rules for Data Migrations: A Case Study on Material Master Data --Programming - What is Next? -- Low-Code is Often High-Code, So We Must Design Low-Code Platforms to Enable Proper Software Engineering -- Time for All Programs, Not Just Real-Time Programs --Integrated Modeling and Development of Component-Based Embedded Software in Scala -- Slang: The Sireum Programming Language --HAMR: An AADL Multi-Platform Code Generation Toolset --Fundamental Constructs in Programming Languages -- Introducing Dynamical Systems and Chaos Early in Computer Science and Software Engineering Education can Help Advance Theory and Practice of Software Development and Computing -- GATE: Gradual Effect Types -- Fixing Classification: A Viewpoint-based Approach -- The Future of Programming and Modelling: a Vision -- Towards Model-based Intent-Driven Adaptive Software -- The Interoperability Challenge: Building a model driven Digital Thread platform for CPS -- Programming vs. That Thing Subject Matter Experts Do -- Aligned, Purpose-Driven Cooperation: The Future Way of System Development -- RAILS: Roadmaps for AI integration in the raiL Sector -- A Journey through Software Model Checking of Interlocking Programs -- Supporting the Development of Hybrid ERTMS/ETCS Level 3 with Formal Modelling, Analysis and Simulation -- Formal Methods in Railway Signalling Infrastructure Standardisation Processes -- sVerify: Verifying Smart Contracts through Lazy Annotation and Learning -- Verifying temporal properties of stigmergic collective systems using CADP.

Sommario/riassunto

This book constitutes contributions of the ISoLA 2021 associated events. Altogether, ISoLA 2021 comprises contributions from the proceedings originally foreseen for ISoLA 2020 collected in 4 volumes, LNCS 12476: Verification Principles, LNCS 12477: Engineering Principles, LNCS 12478: Applications, and LNCS 12479: Tools and Trends. The contributions included in this volume were organized in the following topical sections: 6th International School on Tool-Based Rigorous Engineering of Software Systems; Industrial Track; Programming: What is Next; Software Verification Tools; Rigorous Engineering of Collective Adaptive Systems.