1. Record Nr. UNINA9910349307003321 Numerical Software Verification: 12th International Workshop, NSV Titolo 2019, New York City, NY, USA, July 13-14, 2019, Proceedings / / edited by Majid Zamani, Damien Zufferey Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-28423-9 Edizione [1st ed. 2019.] 1 online resource (XV, 145 p. 68 illus., 42 illus. in color.) Descrizione fisica Collana Theoretical Computer Science and General Issues, , 2512-2029;; 11652 005.14 Disciplina Soggetti Computer science Software engineering Artificial intelligence Computers **Professions** Computer Science Logic and Foundations of Programming Software Engineering Artificial Intelligence The Computing Profession Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes Index. Nota di contenuto Tutorials -- Correctness and Optimality for Control Systems --Modeling, Control, and Verification of an Automated Transport System -- Formal Methods for Highly Automated Driving Applications -- Trust, Resilience and Interpretability of Al Models -- Reinforcement Learning and Formal Requirements -- Contributed Papers -- An Evaluation of Monte-Carlo Tree Search for Property Falsification on Hybrid Flight Control Laws -- Rigorous Continuous Evolution of Uncertain Systems -- Stochastic Local Search for Solving Floating-Point Constraints --Evaluating Branching Heuristics in Interval Constraint Propagation for Satisfiability -- Approximate Probabilistic Relations for Compositional

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the Implementation of Numerical Algorithms.

Sommario/riassunto

This book constitutes the proceedings of the 12th International Workshop on Numerical Software Verification, NSV 2019, held in New York City, NY, USA, in July 2019 - colocated with the International Conference on Computer Aided Verification, CAV 2019. The 5 full papers presented together with 2 short papers, 3 abstracts of invited talks, and 2 tutorial papers were carefully reviewed and selected from numerous submissions. The NSV 2017 workshop is dedicated to the development of logical and mathematical techniques for the reasoning about programmability and reliability.