Record Nr. UNINA9910349275703321 Testing Software and Systems: 31st IFIP WG 6.1 International **Titolo** Conference, ICTSS 2019, Paris, France, October 15-17, 2019, Proceedings / / edited by Christophe Gaston, Nikolai Kosmatov, Pascale Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-31280-1 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XIV, 297 p. 247 illus., 41 illus. in color.) Programming and Software Engineering;; 11812 Collana Disciplina 005.30287 005.1 Soggetti Software engineering Computer organization Computer logic Artificial intelligence Computers Software Engineering Computer Systems Organization and Communication Networks Logics and Meanings of Programs Artificial Intelligence Computing Milieux Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Test and Articial Intelligence -- Learning a Behavior Model of Hybrid Systems through Combining Model-Based Testing and Machine Learning -- Regular expression learning with evolutionary testing and repair -- Testing Chatbots using Metamorphic Relations -- Generating Biased Dataset for Metamorphic Testing of Machine Learning Programs -- Test Case Generation -- Combining Model Renement and Test Generation for Conformance Testing of the IEEE PHD Protocol using

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State Machine With Timed Guards and Timeouts -- Empirical Approaches -- An Empirical Evaluation of Search Algorithms for App Testing -- Performance comparison of two search-based testing strategies for ADAS System Validation -- Testing and Verication Techniques -- Bounded Exhaustive Testing with Certied and Optimized Data Enumeration Programs -- A Mechanised Proof of an Adaptive State Counting Algorithm -- A Model Checking based Approach for Detecting SDN Races -- Security and Performance Testing -- Towards an Ecient Performance Testing through Dynamic Workload Adaptation -- DYNAMOJM: A JMeter Tool for Performance Testing using Dynamic Workload Adaptation -- Attack tolerance for service-based applications in the Cloud -- Industrial Applications --Automatic generation of test oracles from component based software architectures -- Industrial IoT Security Monitoring and Test on Fed4Fire+ Platforms -- TestDCat: Catalog of Test Debt Subtypes and Management Activities.

Sommario/riassunto

This book constitutes the refereed proceedings of the 31st IFIP WG 6.1 International Conference on Testing Software and Systems, ICTSS 2019, held in Paris, France, in October 2019. The 14 regular papers and 3 short papers presented were carefully reviewed and selected from 30 submissions. This year also included an additional industrial paper. ICTSS is a series of international conferences addressing the conceptual, theoretic, and practical problems of testing software systems, including communication protocols, services, distributed platforms, middleware, embedded and cyber-physical systems, and security infrastructures.