Record Nr. UNISA996465514803316 Lectures on Runtime Verification [[electronic resource]]: Introductory Titolo and Advanced Topics / / edited by Ezio Bartocci, Yliès Falcone Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-75632-X Edizione [1st ed. 2018.] 1 online resource (VII, 233 p. 28 illus.) Descrizione fisica Programming and Software Engineering;; 10457 Collana Disciplina 004 Soggetti Software engineering Computers Computer logic Computer system failures Software Engineering The Computing Profession Logics and Meanings of Programs System Performance and Evaluation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto An Introduction to Runtime Verification -- Discovering Concurrency Errors -- Monitoring Events That Carry Data -- Runtime Error Reaction and Prevention -- Specification-based Monitoring of Cyber-Physical Systems: A Survey on Theory, Tools and Applications -- Runtime Verification for Decentralized and Distributed Systems -- Industrial Experiences with Runtime Verification of Financial Transaction Systems: Lessons Learnt and Standing Challenges. Sommario/riassunto The idea of this volume originated from the need to have a book for students to support their training with several tutorials on different aspects of RV. The volume has been organized into seven chapters and the topics covered include an introduction on runtime verification. dynamic analysis of concurrency errors, monitoring events that carry data, runtime error reaction and prevention, monitoring of cyberphysical systems, runtime verification for decentralized and distributed

systems and an industrial application of runtime verification techniques

in financial transaction systems.	