Record Nr. UNISA996466325703316 Symposium on Real-Time and Hybrid Systems [[electronic resource]]: **Titolo** Essays Dedicated to Professor Chaochen Zhou on the Occasion of His 80th Birthday / / edited by Cliff Jones, Ji Wang, Naijun Zhan Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-030-01461-4 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XII, 263 p. 68 illus.) Collana Theoretical Computer Science and General Issues, , 2512-2029;; 11180 005.1 Disciplina Soggetti Computer science Software engineering Compilers (Computer programs) Electronic digital computers—Evaluation Artificial intelligence Theory of Computation Software Engineering Compilers and Interpreters System Performance and Evaluation Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Think Sequential, Run Parallel -- Concurrency: Handling interference Formally -- Decidability of the Initial-state Opacity of Real-time Automata -- Domain Science and Engineering: A Review of 10 Years Work -- HAT: Analyzing Linear Hybrid Automata As Labeled Transition System -- Overview: System Architecture Virtual Integration Based on an AADL Model -- Characterization and Verification of Stuttering Equivalence -- Q-SI: A Quantum Programming Environment -- The Demon, the Gambler, and the Engineer - Reconciling Hybrid-System Theory with Metrology -- Linking Theories of Probabilistic

Programming -- Space for Traffic Manoeuvres: An Overview -- Cloud

Robotics: A Distributed Computing View -- Analyzing Interrupt

Handlers via Interprocedural Summaries.

## Sommario/riassunto

This volume is published in honor of Professor Chaochen Zhou's 80th birthday. The Festschrift contains 13 refereed papers by leading researchers who were among the participants of the celebratory conference in Changsha, China that took place in October 2017. The papers cover a broad spectrum of subjects related to Formal Methods for the development of computer systems. Topics include Probabilistic Programming, Concurrency, Quantum Computing, Domain Engineering, Real-time and Hybrid Systems, and Cloud Computing. Chaochen Zhou is internationally recognized for his own contributions and for the wide influence that he has had through his appointments in Oxford (UK) where he collaborated with Professor Tony Hoare, Lyngby (Denmark) where he worked with Professor Dines Bjørner, UNU-IIST (Macau) where he moved from being Principal Research Fellow to his appointed as Director of the Institute, as well as in Beijing. His book on the Duration Calculus (joint with Michael Hansen) made a seminal contribution to specifying and reasoning about real-time systems. Chaochen Zhou's contributions have been marked by his election as a member of the Chinese Academy of Sciences.