Record Nr. UNINA9910349430403321 It's All About Coordination: Essays to Celebrate the Lifelong Scientific **Titolo** Achievements of Farhad Arbab / / edited by Frank de Boer, Marcello Bonsangue, Jan Rutten Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-319-90089-7 Edizione [1st ed. 2018.] 1 online resource (XII, 245 p. 52 illus.) Descrizione fisica Programming and Software Engineering;; 10865 Collana 004.35 Disciplina Soggetti Software engineering Programming languages (Electronic computers) Computer programming Computer simulation Artificial intelligence Mathematical logic Software Engineering Programming Languages, Compilers, Interpreters **Programming Techniques** Simulation and Modeling Artificial Intelligence Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Discovering the "Glue" Connecting Activities: Exploiting Monotonicity to Nota di contenuto Learn Places Faster -- Self-Stabilization Through the Lens of Game Theory -- Energy-Utility Analysis of Probabilistic Systems with Exogenous Coordination -- A note on reactive transitions and Reo connectors -- Personal Note: Working with Farhad Arbab 1990-2005 -- Soft Constraint Automata with Memory -- On the Relation between Control-based and Data-based Coordination Languages -- Release the Beasts: When Formal Methods Meet Real World Data -- Formalizing

Propagation of Priorities in Reo, using Eight Colors -- Learning to

## Sommario/riassunto

Coordinate -- Reo Connectors and Components as Tagged Signal Models -- Generating Arduino C Codes from Mediator -- From Soft Agents to Soft Component Automata and Back -- Argumentation as Exogenous Coordination -- Extending Paradigm with Data.

This Festschrift volume has been published to celebrate the lifelong scientific achievements of Farhad Arbab on the occasion of his retirement from the Centre of Mathematics and Computer Science (CWI). Over the years Farhad Arbab has sucessfully been engaged in scientific explorations in various directions: Software Composition, Service Oriented Computing, Component-based Software, Concurrency Theory, Coordination Models and Languages, Parallel and Distributed Computing, Visual Programming Environments, Constraints, Logic and Object-Oriented Programming. Farhad Arbab has shaped the field of Coordination Models and Languages. His insight that it is all about exeogeneous coordination gave rise to the striking elegance and beauty of Reo: an exogenous coordination model based on a formal calculus of channel composition. Reo has been extremely successful and is having a great impact in many of the areas mentioned above. The present volume collects a number of papers by several of Farhad's close collaborators over the years. .