

1. Record Nr.	UNINA9910337846403321
Titolo	Carl Adam Petri: Ideas, Personality, Impact / / edited by Wolfgang Reisig, Grzegorz Rozenberg
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-96154-3
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (240 pages) : illustrations
Disciplina	003.54
Soggetti	Computers Bioinformatics Software engineering Theory of Computation Computational Biology/Bioinformatics Software Engineering/Programming and Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Perspectives on Petri's Work -- Discovering Petri Nets: A Personal Journey -- Observations of a Lateral Entrant -- Nets, Cats and Pigs: Carl Adam Petri and His Slides -- Invention or Discovery? -- Petri's Understanding of Nets -- On the Two Worlds of Carl Adam Petri's Nets -- Petri Nets: The Next 50 Years—An Invitation and Interpretative Translation -- Petri Nets Are (Not Only) Distributed Automata -- Petri Nets: A Simple Language and Tool for Modeling Complex Ideas -- Part II: Personal Recollections.-Carl Adam Petri: A Tribute from Aarhus -- Some Interactions with Carl Adam Petri over Three Decades -- Petri Nets and Petri's Nets: A Personal Perspective -- Coffee and Cigarettes -- Early Interactions with Carl Adam Petri.-A Personal Journey in Petri Net Research -- Part III: Technical Themes -- Carl Adam Petri's Synchronic Distance -- How Carl Adam Petri Deeply Influenced My Understanding of Invariance and Parallelism -- Toward Distributed Computability Theory -- Petri Inheritance: The Foundation of Nondeterministic, Concurrent Systems -- Coordinating Behaviour -- Inductive Counting and the Reachability Problem for Petri Nets -- Part

IV: Connecting to Other Areas -- On Petri Nets in Performance and Reliability Evaluation of Discrete Event Dynamic Systems -- Modelling Time Using Petri Nets -- All True Concurrency Models Start with Petri Nets: A Personal Tribute to Carl Adam Petri -- Petri Nets for BioModel Engineering: A Personal Perspective -- Petri Nets in Systems Biology: Transition Invariants, Maximal Common Transition Sets, Transition Clusters, Mauritius Maps, and MonaLisa -- From Nets to Circuits and from Circuits to Nets -- Living Lattices -- The Road from Concurrency to Quantum Logics.

---

Sommario/riassunto

This book offers an overview of the key ideas of Petri nets, how they were developed, and how they were applied in diverse applications. The chapters in the first part offer individual perspectives on the impact of Petri's work. The second part of the book contains personal memories from researchers who collaborated with him closely, in particular they recount his unique personality. The chapters in the third part offer more conventional treatments on various aspects of current Petri net research, and the fourth part examines the wide applications of Petri nets, and the relationships with other domains. The editors and authors are the leading researchers in this domain, and this book will be a valuable insight for researchers in computer science, particularly those engaged with concurrency and distributed systems.

---