

1. Record Nr.	UNINA9910254197403321
Titolo	Anticipation Across Disciplines // edited by Mihai Nadin
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-22599-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (394 p.)
Collana	Cognitive Systems Monographs, , 1867-4925 ; ; 29
Disciplina	155.24
Soggetti	Computational intelligence Neural networks (Computer science) Artificial intelligence Computational Intelligence Mathematical Models of Cognitive Processes and Neural Networks Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Theoretical and General Aspects of Anticipation -- Part II Anticipation in Biological and Physiological Systems -- Part III Anticipation in Neural Networks -- Part IV Anticipation in Engineering and Information Technology -- Part V Anticipation, Culture, and Society.
Sommario/riassunto	Never before was anticipation more relevant to the life and activity of humankind than it is today. "It is no overstatement to suggest that humanity's future will be shaped by its capacity to anticipate...." (Research Agenda for the 21st Century, National Science Foundation). The sciences and the humanities can no longer risk explaining away the complexity and interactivity that lie at the foundation of life and living. The perspective of the world that anticipation opens justifies the descriptor "the post-Cartesian Revolution." If anticipation is a valid research domain, what practical relevance can we await? Indeed, anticipation is more than just the latest catch-word in marketing the apps developed by the digital technology industry. Due to spectacular advances in the study of the living, anticipation can claim a legitimate place in current investigations and applications in the sciences and the

humanities. Biology, genetics, medicine, as well as politics and cognitive, behavioral, and social sciences, provide rich evidence of anticipatory processes at work. Readers seeking a foundation for anticipation will find in these pages recent outcomes pertinent to plant life, political anticipation, cognitive science, architecture, computation. The authors contributing to this volume frame experimental data in language that can be shared among experts from all fields of endeavor. The major characteristic is the inference from the richness of data to principles and practical consequences. .

2. Record Nr.	UNINA9910557693303321
Autore	Woo Wai Lok
Titolo	Sensor Signal and Information Processing III
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 online resource (394 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	In the current age of information explosion, newly invented technological sensors and software are now tightly integrated with our everyday lives. Many sensor processing algorithms have incorporated some forms of computational intelligence as part of their core framework in problem-solving. These algorithms have the capacity to generalize and discover knowledge for themselves and to learn new information whenever unseen data are captured. The primary aim of sensor processing is to develop techniques to interpret, understand, and act on information contained in the data. The interest of this book is in developing intelligent signal processing in order to pave the way for smart sensors. This involves the mathematical advancement of nonlinear signal processing theory and its applications that extend far

beyond traditional techniques. It bridges the boundary between theory and application, developing novel theoretically inspired methodologies targeting both longstanding and emergent signal processing applications. The topics range from phishing detection to integration of terrestrial laser scanning, and from fault diagnosis to bio-inspired filtering. The book will appeal to established practitioners, along with researchers and students in the emerging field of smart sensor signal processing.
