

1. Record Nr.	UNINA9910253885803321
Autore	Iqbal Azlan
Titolo	The Digital Synaptic Neural Substrate : A New Approach to Computational Creativity // by Azlan Iqbal, Matej Guid, Simon Colton, Jana Krivec, Shazril Azman, Boshra Haghghi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-28079-1
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (127 p.)
Collana	SpringerBriefs in Cognitive Computation, , 2212-6023 ; ; 3
Disciplina	006.3
Soggetti	Neurosciences Artificial intelligence Computers Artificial Intelligence Theory of Computation
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 and index.
Nota di contenuto	Preface -- Introduction -- Review -- Methodology -- Experimental work -- Consolidation of results -- Conclusions -- Index -- Appendix A -- Appendix B -- Appendix C -- Appendix D -- Appendix E -- Appendix F.
Sommario/riassunto	This book describes a new computational approach to creativity. With chess as the domain of investigation, the authors show experimentally how a computer can be imbued with the 'spark' of creativity that enables it to compose chess problems or puzzles that are both challenging and aesthetically appealing to humans. This new approach called the Digital Synaptic Neural Substrate (DSNS) mimics the brain's ability to combine fragments of seemingly unrelated information from different domains (such as chess, photographs and music) to inspire itself to create new objects in any of them. Representing the cutting edge in computational creativity research, this book will be useful to students, educators and researchers in the field as well as artificial intelligence (AI) practitioners, in general.

