

1. Record Nr.	UNINA9910299728103321
Titolo	Computational Approaches to Analogical Reasoning: Current Trends // edited by Henri Prade, Gilles Richard
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	9783642545160 3642545165
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (X, 395 p. 105 illus., 18 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 548
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Part I Analogy in action -- Part II Modeling analogy -- Part III From cognition to computational experiments.
Sommario/riassunto	Analogical reasoning is known as a powerful mode for drawing plausible conclusions and solving problems. It has been the topic of a huge number of works by philosophers, anthropologists, linguists, psychologists, and computer scientists. As such, it has been early studied in artificial intelligence, with a particular renewal of interest in the last decade. The present volume provides a structured view of current research trends on computational approaches to analogical reasoning. It starts with an overview of the field, with an extensive bibliography. The 14 collected contributions cover a large scope of issues. First, the use of analogical proportions and analogies is explained and discussed in various natural language processing problems, as well as in automated deduction. Then, different formal frameworks for handling analogies are presented, dealing with case-based reasoning, heuristic-driven theory projection, commonsense reasoning about incomplete rule bases, logical proportions induced by similarity and dissimilarity indicators, and analogical proportions in

lattice structures. Lastly, the volume reports case studies and discussions about the use of similarity judgments and the process of analogy making, at work in IQ tests, creativity or other cognitive tasks. This volume gathers fully revised and expanded versions of papers presented at an international workshop, as well as invited contributions. All chapters have benefited of a thorough peer review process.
