

1. Record Nr.	UNINA9910788171203321
Autore	Ballard Dana H (Dana Harry), <1946->
Titolo	Brain computation as hierarchical abstraction / / Dana H. Ballard
Pubbl/distr/stampa	Cambridge, Massachusetts : , : The MIT Press, , [2015]
ISBN	0-262-32382-6 0-262-53412-6 0-262-32381-8
Descrizione fisica	1 online resource (xiv, 440 pages) : illustrations (black and white, and colour)
Collana	Computational neuroscience
Disciplina	612.8/23343
Soggetti	Computational neuroscience Neurobiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	The vast differences between the brain's neural circuitry and a computer's silicon circuitry might suggest that they have nothing in common. In fact, as Dana Ballard argues in this book, computational tools are essential for understanding brain function. Ballard shows that the hierarchical organisation of the brain has many parallels with the hierarchical organisation of computing; as in silicon computing, the complexities of brain computation can be dramatically simplified when its computation is factored into different levels of abstraction.