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Descrizione fisica	1 online resource (296 pages)
Disciplina	612.82
Soggetti	Neural networks & fuzzy systems Neural networks (Neurobiology)
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Livello bibliografico	Monografia
Nota di contenuto	1. End-to-End Benchmarking of Chiplet-Based In-Memory Computing -- 2. Implementation of Associative Memory Learning in Mobile Robots Using Neuromorphic Computing -- 3. Study of RRAM-Based Binarized Neural Networks Inference Accelerators Using an RRAM Physics-Based Compact Model -- 4. Enabling Neuromorphic Computing for Artificial Intelligence with Hardware-Software Co-Design -- 5. Neuromorphic Computing between Reality and Future Needs -- 6. A Study of the Comparison between Artificial Neural Networks, Logistic Regression and Similarity Weighted Instance-Based Learning in Modeling and Predicting Trends in Deforestation -- 7. Spiking Neural Encoding and Hardware Implementations for Neuromorphic Computing -- 8. Cortical Columns Computing Systems: Microarchitecture Model, Functional Building Blocks, and Design Tools -- 9. Artificial Intelligence Approaches for Studying the pp Interactions at High Energy Using Adaptive Neuro-Fuzzy Interface System -- 10. Study of Approaches to Predict Personality Using Digital Twin -- 11. Scaling Subspace-Driven Approaches Using Information Fusion.
Sommario/riassunto	Dive into the cutting-edge world of and #60;i and #62;Neuromorphic Computing and #60;/i and #62;; a groundbreaking volume that unravels the secrets of brain-inspired computational paradigms. Spanning neuroscience, artificial intelligence, and hardware design, this book presents a comprehensive exploration of neuromorphic systems, empowering both experts and newcomers to embrace the limitless

potential of brain-inspired computing. Discover the fundamental principles that underpin neural computation as we journey through the origins of neuromorphic architectures, meticulously crafted to mimic the brain's intricate neural networks. Unlock the true essence of learning mechanisms - unsupervised, supervised, and reinforcement learning - and witness how these innovations are shaping the future of artificial intelligence.
