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Nota di contenuto	Intro -- Preface -- Organization -- Editorial Board -- Advisory Board -- Program Committee of the XIX International Conference "Neuroinformatics-2017" -- General Chair -- Co-chairs -- Program Committee -- Contents -- Neural Network Theory -- The Analysis of Regularization in Deep Neural Networks Using Metagraph Approach -- Abstract -- 1 Introduction -- 2 Description of the Used Neural Network -- 3 Regularization of Deep Neural Networks -- 4 Regularization Representation Using Metagraph Approach -- 5 Experiments -- 6 Conclusion -- References -- Adding Noise During Training as a Method to Increase Resilience of Neural Network Solution of Invers ... -- Abstract -- 1 Introduction -- 2 The Initial Data and the Statement of the IP of MTS -- 3 Description of the Noise -- 4 The Use of Artificial

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Sommario/riassunto

This book describes new theories and applications of artificial neural networks, with a special focus on neural computation, cognitive science and machine learning. It discusses cutting-edge research at the

intersection between different fields, from topics such as cognition and behavior, motivation and emotions, to neurocomputing, deep learning, classification and clustering. Further topics include signal processing methods, robotics and neurobionics, and computer vision alike. The book includes selected papers from the XIX International Conference on Neuroinformatics, held on October 2-6, 2017, in Moscow, Russia.