Seminar

Elena Agliari
Assistant Professor
Department of Mathematics "G. Castelnuovo"
Università La Sapienza, Roma

11:00 - 1 Jul 2020 - Webex platform

Title

Machine Learning from a mathematical perspective

Abstract

In this seminar I will first give a general introduction to neural networks and to the underlying mechanisms allowing for learning. Then, adopting a statistical-mechanics approach, I will explain in more details some standard techniques for their investigation along with the main results available; in this part I will especially focus on the Hopfield network (i.e., the paradigmatic model for retrieval tasks) and on the Boltzmann machine (i.e., the paradigmatic model for learning). I will conclude by summarizing recent researches and open challenges.