SCUOLA
NORMALE
SUPERIORE

SEMINARIO DI FINANZA QUANTITATIVA

giovedì 31 maggio 2018
ore 17:00

Scuola Normale Superiore
Pisa
Aula Fermi

Aurélien Decelle

(Université Paris-Sud XI)

terrà un seminario dal titolo:

"Spectral learning of Restricted Boltzmann Machines"

Abstract:
In this presentation I will expose our recent results on the Restricted Boltzman Machine (RBM). The RBM is a generative model very similar to the Ising model, it is composed of both visible and hidden binary variables, and traditionally used in the context of machine learning. In this context, the goal is to inferred the parameters of the RBM such that it reproduces correctly a dataset's distribution. Although they have been widely used in computer science, the phase diagram of this model is not known precisely in the context of learning. In particular, it is not known how the parameters influence the learning, and what exactly is learned within the parameters of the model. In our work, we show how the SVD of the data governs the first phase of the learning and how this decomposition helps to dynamics and the equilibrium properties of the model.

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze