Séminaire de matrices, cordes et géométries aléatoires

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Mardi 30/04/2019, 14h15-15h15

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Using Machine Learning to understand Natural Language

Sheer El Showk

This talk aims to introduce basic concepts from machine learning (ML) and natural language processing (i.e. ML applied to human language) to a non-expert audience. I will try to motivate, present and address the problem of how natural language (human generated text) can be represented and analyzed in a mathematical way. In addition to explaining various fundamental concepts in machine learning (supervised vs unsupervised learning, neural networks, etc), I will introduce and explain the concept of an "embedding space", a powerful and conceptually interesting new approach. Time permitting, I will go further and briefly touch on recent developments such as memory, attention, knowledge and reasoning in the context of neural networks.