Workshop 2018
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Title: « A quasi-Bayesian perspective to Machine Learning »

Abstract:

Quasi-Bayesian learning algorithms are increasingly popular in machine learning, due to their PAC generalization properties and flexibility. I will present a self-contained introduction on {$\varnothing$, quasi-Bayesian, PAC-Bayesian} learning, and discuss their theoretical and algorithmic ins and outs. I will then focus on the recent paper [Alquier and Guedj (2018), Simpler PAC-Bayesian Bounds for Hostile Data, Machine Learning], and present how PAC-Bayesian learning may be used to efficiently learn with dependent and/or heavy-tailed (aka hostile) data.