

Séminaire de Probabilités et Statistique

Mardi 28 janvier à 14h00

Laboratoire Dieudonné
Salle de conférence - LJAD

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Too Relaxed to Be Fair

In this talk, I address the problem of classification under fairness constraints. Given a notion of fairness, the goal is to learn a classifier that is not discriminatory against a group of individuals. In the literature, this problem is often formulated as a constrained optimization problem and solved using relaxations of the fairness constraints. One can show that many existing relaxations are unsatisfactory: even if a solution satisfies the relaxed constraint, its true fairness can be quite bad. I will present a principled framework called SearchFair to solve this problem. This new approach uses a strongly convex formulation and comes with theoretical guarantees on the fairness of its solution. In practice, this method gives promising results on real data.