Contribution ID: **35** Type: **YSF oral presentation**

Decorrelation using Optimal Transport

Monday 30 October 2023 17:40 (10 minutes)

Novel decorrelation method using Convex Neural Optimal Transport Solvers (Cnots) that is able to decorrelate a continuous feature space against protected attributes with optimal transport. We demonstrate how well it performs in the context of jet classification in high energy physics, where classifier scores are desired to be decorrelated from the mass of a jet.

Brainstorming idea [title]

Monotonic neural networks to avoid overfitting

Brainstorming idea [abstract]

The paper: "Robust and Provably Monotonic Networks" showed how monotonic networks could be used in HEP. Would be interesting to see if this could be extended to other architectures and data structures.

Primary authors: RAINE, Johnny (Universite de Geneve (CH)); ALGREN, Malte (Universite de Geneve (CH)); GOLLING, Tobias (Universite de Geneve (CH))

Presenter: ALGREN, Malte (Universite de Geneve (CH))

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