

On the likelihood of randomly perturbed max-solutions

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In recent years new probability models were devised in machine learning to reason about high dimensional structures such as arrangements of objects in computer vision or molecular structures in computational biology. These probability distributions measure the stability of prediction, i.e., the highest scoring structure, to random perturbations of the structures' scores. Consequently, one can draw an unbiased sample from these distributions by executing a max-solver. In this talk I will present these probability models and relate their learning to novel moment matching conditions.