

Statistical learning methods for multipartite ranking

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Multipartite ranking is a statistical learning problem that consists in ordering observations that belong to a high dimensional feature space in the same order as the labels, so that the observations with the highest label appear at the top on the list. This work aims to understand the probabilistic nature of the multipartite ranking problem in order to obtain theoretical guaranties for ranking algorithms. In that framework, the output of a ranking algorithm takes the form of a scoring function, a function that maps the space of the observations to the real line which order is induced using the values on the real line.