

Extended Poisson Regression Model for Analyzing Ordered Categorical Response Data

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Abstract: In this talk I will introduce a unified approach to study the degree to which a dimension reduction estimator exhausts the the whole dimension reduction space. This approach will be applied to study several well known estimators as well as the recently developed contour-regression techniques. Broadly speaking, among the existing dimension reduction methods in the literature, those with square-root of n convergence rate do not necessarily exhausts the dimension reduction space — or at least whether it does is not yet well understood, and those that are known to exhaust the dimension reduction space but converge at a slower speed than square root n . Thus this work is an attempt to fill in this gap of understanding. I will also demonstrate the practical importance of exhaustive estimation in applications by a few data sets to.