Ordinal Regression Problem

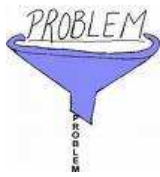
?

infant: 1   child: 2   teenager: 3   adult:4

Given some pairs (input x_n, rank y_n) with a total **order** associated with the **discrete** ranks, find a function $r(x)$ that predicts the rank of an unseen x well.

Our Contributions

A new reduction framework that transforms ordinal regression to binary classification **systematically**, *and ...*

- **reveals many new ordinal regression results** from well-known binary classification ones

- makes the design and implementation of ordinal regression algorithms **much easier**

- explains many existing ordinal regression algorithms **as special cases**

- enlightens **original methods** for proving new ordinal regression theorems

- leads to **promising experimental results**

Poster **#12**:
Ordinal Regression by
Extended Binary Classification