

Optimal ROC Curve for a Combination of Classifiers

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Poster M33

- Main contributions:
 - A new method for combining classifiers optimally
 - Generalization of previous work (Provost & Fawcett 2001, Flach & Wu 2005)
 - Experiments showing effectiveness and feasibility

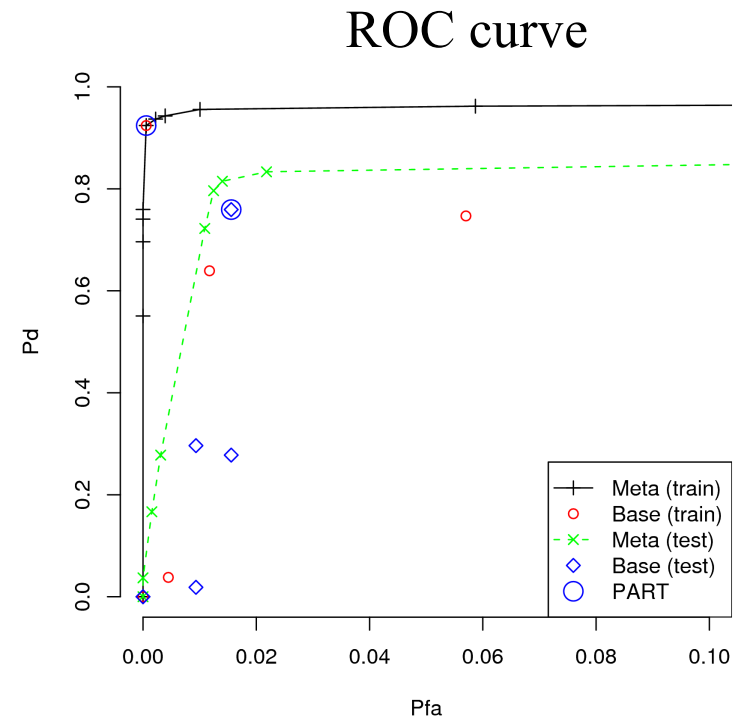


Figure 1: Our meta-classifier (lines) outperforms base classifiers (points).

- Theorems:
 1. We prove our method's ROC curve is everywhere optimal
 2. In the independent case, we show AND and OR are optimal points
 3. We give sufficient conditions for optimality of Provost & Fawcett's method