Empirical Utility Optimization

- Basic idea
  - Compute the utility on the training data for each candidate score threshold
  - Choose the threshold that gives the maximum utility on the training data set
- Difficulty: Biased training sample!
  - We can only get an upper bound for the true optimal threshold
  - Could a discarded item be possibly interesting to the user?
- Solution:
  - Heuristic adjustment (lowering) of threshold