Handouts: Name of Your Presentation

KDD Cup 2001: Gene/Protein Function Prediction Using the Multirelational Learning Algorithm RELAGGS

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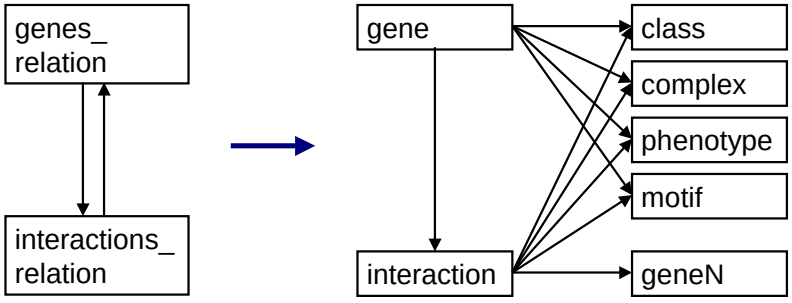
Preparation: A Multirelational Task

- General: renormalize into multiple tables as a natural representation of the data



- Specific for KDD Cup tasks 2/3: consider only interactions with high correlations, assume transitivity, make symmetry explicit

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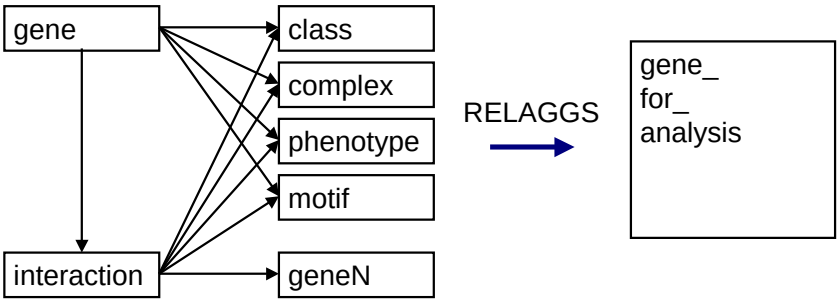
Algorithm: RELAGGS [Krogel/Wrobel:ILP01]

- Computes selected joins following user-defined *foreign links*
- Performs automatic transformation of multiple tables into single table with the help of aggregate functions



- Uses propositional learner such as C4.5 or SVM*light*

Summary

- RELAGGS allows to work with natural multirelational form of data immediately
- Easy specification of possible joins with foreign links
- Maximal preservation of information through aggregation

- Accuracies:
  93,6% on task 2: rank 1
  69,8% on task 3: rank 4

- http://kd.cs.uni-magdeburg.de
- M.-A. Krogel, S. Wrobel: Transformation-Based Learning Using Multirelational Aggregation. 11th International Conference On Inductive Logic Programming, Strasbourg, France, Sept. 2001.