## Data Mining Exam HWS 2013 (First take)

- Briefly describe what hierarchical agglomerative clustering is.
  What does the y-axis of an dendogram indicate? Name two advantages and one disadvantage in comparison to K-Means clustering.
- 2. Explain how the Hunt's Algorithm with the Decision Tree works. What impurity measures do you know? Name two of them.
- 3. Bayesian classification: How does the classifier handle missing values? How is it possible to cope with zero probabilities?
- 4. Rule based learning. Briefly explain the characteristics. What is the problem with the Rule Simplification? What can we do against it?
- 5. Explain the Apriori Principle (From Association Rule)
- 6. TF-IDF. 3 little sentences, each is a document d. Measure the similarity between the documents. Choose a similarity of your choice (Note: choose a similarity where you don't need to calculate complex terms)