## **MACHINE LEARNING**

## exam topics 2017

- 1. General machine learning dilemmas (overtraining, the curse of dimensionality)
- 2. Decision tree classifiers (ID3, c4.5)
- 3. Linear machines and the perceptron classifier
- 4. Support Vector Machines
- 5. Regression
- 6. Neural networks
- 7. Bayes decision theory (definitions and discriminant functions)
- 8. Parameter estimaton by Maximum-likelihood and Bayes-estimation
- 9. Parametric classifiers (naïve Bayes)
- 10. Non-parametric classifiers (Parzen windows, k-nearest neighbour)
- 11. Clustering
- 12. Generative modeling (EM algorithm)
- 13. Recommender systems
- 14. Reinforcement learning