

**DM 555: Data Mining and Statistical Learning**  
Autumn term 2016

**Repetition 3**

**Repetition 3-1**

- (a) In what sense do we ‘explain’ data in terms of a ‘model’?
- (b) How do we use Bayes’ rule for learning a model to explain data?
- (c) Explain the naïve Bayes classifier.
- (d) Discuss the algebraic/geometric view vs. the probabilistic view of data. Give examples in explaining learning algorithms encountered in the lecture geometrically vs. probabilistically.
- (e) Discuss parametric learning vs. non-parametric learning. Give examples.
- (f) Discuss similarities and differences between the  $k$ -means and the EM clustering algorithms.