Artificial Intelligence 2
Quiz #10 (learning probabilistic models)

What is Bayesian learning?

Describe the formula for Bayesian prediction.

Which method gives a more precise prediction - Bayesian learning or MAP (maximum a posteriori hypothesis)? What is the differences between these two methods?

How does ML (maximum likelihood) learning differs from the MAP learning?

What is the core idea of the MDL (minimum description length) learning?

How do we learn the CPTs in Bayesian networks if we have complete data?

How do we learn the CPTs in Bayesian networks if information about some variables is missing? How are these variables called?

Describe the core idea of EM (expectation-maximization) algorithm.

Describe a naïve Bayes model. How many parameters do we need to learn if all the random variables have three possible values?