Machine Learning Methods and Tools: Q&A

Disclaimer: The questions below are just examples of some of

the type of questions that may be part of the exam. The

actual questions may (will!) be different and may cover other

topics presented during the course.

Level: Easy

1. Describe the convolution operation.
2. What is regularization? Describe possible regularizes and their difference.
3. What are autoencoders and variational autoencoders?

Level: Medium

1. What is the difference between t-SNE and SVD?
2. Describe how Cross-Validation works.
3. How are the nodes of the decision tree chosen?

Level: Difficult

1. Truncated backpropagation through time.
2. How does the Q-learning algorithm work?
3. Describe Bayesian optimization with Gaussian processes.

Lab:

1. What is the train\_test\_split function from Sklearn and how does it work?
2. What is Embedding layer in Keras?
3. What is Pandas Dataframe?