## Natural Language Processing exam program

- 1. BoW, TF-iDF
- 2. Embeddings main idea
- 3. word2vec: linearity, skip-gram, negative sampling
- 4. Unsupervised translation approach
- 5. CNNs in text processing
- 6. Attention mechanism
- 7. Self-attention mechanism
- 8. Transformer structure
- 9. Machine translation metrics, quality functions
  - a. BLEU, ROUGE, METEOR
- 10. BERT structure, main ideas
- 11. BERT (and other models) pre-training mechanisms
- 12. Question-answering systems
- 13. Distillation mechanism, teacher and student models
- 14. Self-critical sequence training (SCST, RL-related approach in NLP)