

Natural language processing in Python



Training recipients

The training is intended for people who want to gain basic knowledge of natural language processing (NLP). During the course, lectures, discussions, and exercises alternate. The discussed items are illustrated by examples in Python, which are further developed in hands-on tasks.



Benefits

NLP, along with computer vision, is one of the most popular areas of machine learning in both commercial applications and research. Course participants gain elementary theoretical and practical knowledge from the NLP field and are able to apply Python libraries to automatically solve basic language problems.



Training program

1. Regular expressions
2. Text preprocessing
3. Tokenization
4. Stop words, lemmatization
5. Bag-of-words
6. N-gram
7. Word vectors
8. TF-IDF vectorizer, Count vectorizer
9. Word embedding
10. Named-entity recognition
11. Sentiment analysis
12. Application of classic ML algorithms

- 13. Recurrent models
- 14. Introduction to chatbots



Expected preparation of the participant

Basic knowledge of Python and machine learning including pandas and scikit-learn packages.



Duration

2 days / 14 hours

Language

- Training: English