## Lena Shakurova

## **Education**

Radboud UniversityNijmegenMaster, Artificial Intelligence2017-present

Master, Artificial Intelligence
Advanced Research Methods · Text Mining · Statistical Machine Learning

National Research University Higher School of Economics (NRU HSE)

Moscow

Bachelor, Computational Linguistics,

2013-2017

GPA: 8.7/10

Courses: Discrete Mathematics  $\cdot$  Programming (Python)  $\cdot$  Linear Algebra and Mathematical Analysis  $\cdot$  Web-Design  $\cdot$  Computer Tools for Linguistic Research  $\cdot$  Programming (R)  $\cdot$  Theory of Algorithms  $\cdot$  Automatic Natural Language Processing  $\cdot$  Databases  $\cdot$  Information Retrieval  $\cdot$  Neurolinguistics

University of Helsinki Helsinki

Exchange student, Computational Linguistics, GPA: 3.48/4.00

2015-2016

 $Courses: \ Programming \ and \ Natural \ Language \ Processing \ (NLTK) \ \cdot \ Morphological \ Processing \ Tools \ (HFST)$ 

Coursera

Additional Courses

2015–2017

Probability (Penn University) · Machine Leaning (Stanford University) · Divide and Conquer, Sorting and Searching, and Randomized Algorithms (Stanford University)

## **Technical and Personal skills**

- Programming Languages: Python, R, Matlab.
- Web-desigh Skills: HTML, CSS, PHP, JavaScript, Flask, Scrapy.
- o Databases: MySQL, SQLite, MongoDB, PostgreSQL, Elasticsearch.
- Machine Learning: Sklearn, WEKA.
- o NLP instruments: PRAAT, ELAN, Tomita Parser, Toloka, NLTK, LUIS.
- o Other: LATEX, Jupyter Notebook, git, bash, Linux.
- Sentimental Analysis, Chatbots, Word sense disambiguation (WSD), Topic modeling, Named Entity Recognition (NER), Web-crawling, Document clusterisation, Text classification, Dupplicates detection

## **Projects and Professional Experience**

-	Tojecto una i Toressionar Experience
Ρ	rofessional Experience
	NCEM Moscow
0	Computational Linguist August 2016–August 2017
	Working in a team developing monitoring system. I was in charge for the part of the project connected with artificial intelligence and computational linguistics.
	My responsibilities included applying machine learning algorithms to develop text classificator, solving document clustering problems, solving text mining and fact extraction problems, extracting geo locations, writing web-crawlers, writing documentation and working with relational databases.
	TT-Consult Moscow
0	Junior Web Developer June 2014–August 2016
	Editing content, debugging code, re-designing web page and doing Search Engine Optimisation.
Ρ	rojects
0	'Automatic Test Generation based on predictability of words in context'
	The program generates language tests for a given text. The advantage of the instrument is that it is easily
	scalable to another language when language corpora and morphological parser of a good quality given. Code
	and results can be found here: https://github.com/Shakurova/AutomaticTestGenerator.  Telegram Chatbot for collecting periphrases of facts'
O	Telegram chatbot for collecting periphrases of facts  Telegram chatbot collects periphrases of facts (fact of work, for example). The chatbot interacts with
	users and get information about different facts. In the future collected data could be used to train machine
	learning models for text mining. Code can be found here: https://github.com/Shakurova/Paraphrase $_bot$ .
0	'Computer tool for a quantitative typological research'
	The program analyses the distribution of adjectives, creates tables and draws graphics of correlations.
	Interaction with the user interface has also been created. Using results of this program I proved the
	hypothesis that adjectives like 'wet', 'damp', 'humid' differ not only in the degree for qualities. The study
	has been carried out for 3 languages: Russian, English, German. The program is written using Python. Code
	and results can be found here: https://github.com/Shakurova/ngrams.
Δ	additional Information
P	rofessional Interests
	peech Recognition · Recommendation Systems · Sentimental Analysis · Dialog Systems
	Word Sense Disambiguation · Topic Modeling · Named Entity Recognition · Automatic
S	ummarization · Machine translation · Information Retrieval
C	onferences
^	Conference ConCort on Digital Humanities Nizhnyj Novgorod
0	"Instruments of Quantitative Typological Research"  October 2016
A	wards
0	Orange Tulip Scholarship Russia 2017 awardee

- o NRU HSE: 2d degree certificate, Competition in Computational Linguistics.
- o Humboldt Universitat: Semi-intensive German language course, A2.

• **Helsinki University:** Certificate of completion the Language Center Course Assistant program in Russian language teaching.

Publications.

o Universal Dependencies for Russian: A New Syntactic Dependencies Tagset, Lyashevkaya O., Droganova K., Zeman D., Alexeeva M., Gavrilova T., Mustafina N. and Shakurova E., 2016 https://papers.ssrn.com/sol3/papers.cfm?abstract $_id=2859998$ 

Language Skills....

o Native: Russian

o Advanced: English (C1 CEFR Level, CAE)

o Intermediate: German

o Basic: Spanish, Finnish, French, Dutch

Interests.....

Programming · Web-design · Travelling · Music · Psychology · Literature