# Elena Shakurova

#### **Education**

#### National Research University Higher School of Economics (NRU HSE)

Moscow

Bachelor, Computational Linguistics,

2013-2017

GPA: 8.40/10.00

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,

2015-2016

GPA: 3.48/4.00

Courses: Programming and Natural Language Processing (NLTK) · Morphological Processing Tools (HFST)

Coursera

Additional Courses

2015–2016

Probability (Penn University) · Machine Leaning (Stanford University)

#### Technical and Personal skills

- o **Programming Languages:** Python, R (basic), Matlab (basic).
- o Web-desigh Skills: HTML, CSS, PHP, JavaScript, Flask, Scrapy.
- o Databases: MySQL, SQLite, MongoDB, PostgreSQL, Elasticsearch.
- o NLP instruments: PRAAT, ELAN, WEKA.
- o Other: Machine Learning, NLP Tools, LATEX, Jupyter Notebook, git, bash, Linux.

## **Projects and Professional Experience**

Professional Experience.

NPO Progress Soft Moscow

Computational Linguist

August 2016-Present

Writing scripts on Python, applying machine learning algorithms for text classification, solving document clustering problems, writing rules for text mining and fact extraction, web-crawling, writing documentation, working with relational databases.

Projects.....

Telegram Chatbot for collecting periphrases of facts' (ongoing)

I am developing a Telegram chatbot that will collect 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:  $\frac{1}{2} \frac{1}{2} \frac{1}$ 

'Computer tool for a quantitave typological research' (3d grade project)

I developed a program that 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.

o 'Russian Learner Corpus of German speaking Students'

On the base of my 2 grade project I created 'Russian Learner Corpus of German speaking Students' using Python and ElasticSearch. The corpora gives an opportunity to search examples of different types of mistakes. Code can be found here: https://github.com/Shakurova/elasticsearch-python.

#### **Additional Information**

Conferences

### Conference ConCort on Digital Humanities

Nizhnyj Novgorod

"Instruments of Quantitative Typological Research"

October 2016

Certificates.....

- NRU HSE: 3d degree certificate, Competition in Computational Linguistics.
- 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 $_id=2859998$ 

Volunteering.....

- ESN member: I am a member of ESN student organization and I organize HSE Moscow Cultural and Language Exchange Club. Two years ago our Language Club has started a Language Exchange Program, during which we match student who wants to practice each others languages. I have been till present the leader and coordinator of this project. As a member of ESN organization I also help exchange students during their exchange period at our University.
- o Russian Tutor at the University of Helsinki: During my exchange period at University of Helsinki I was a Russian teacher assistant (assisting in classroom interaction, teaching and correcting students' written exercises) and a host at Russian Speaking Club.
- Organizing competitions: Volunteering at academic competitions for prospective NRU HSE students.

Language Skills....

- Native: Russian
- Advanced: English (C1 CEFR Level, CAE)
- o Intermediate: German
- o Basic: Spanish, Finnish, French

Interests

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