# Lena Shakurova | NLP Engineer

Experienced NLP Engineer with a background in Computational Linguistics and AI and 3+ years of professional experience applying NLP methods to real-world challenges across different domains.

# **Work Experience**

## **NLP Research Engineer intern**

TextKernel, Amsterdam

python • tensorflow • sequence labelling • cross-lingual embeddings

November 2018-July 2019

Doing research and development on multilingual CV parsing for low-resource languages.

- Developed a universal Slavic CV parsing pipeline for 5 languages, using transfer learning and cross-lingual embeddings
- Built a cross-lingual model that performs well in zero-shot CV parsing scenario
- Developed guidelines and best practices for learning cross-lingual embeddings and doing transfer learning for our task of CV parsing
- Created new intrinsic metrics for evaluating the quality of cross-lingual word embeddings
- Improved error analysis work flow
- Presented at two conferences and published a paper

### Self-employed NLP Specialist

Netherlands

dialogflow • designing conversations

April 2018-present

Working on long-term projects as an NLP specialist, mainly doing chatbot development.

- Did research on intent detection and named entity recognition approaches for an HR chatbot
- Developed a prototype of a Dutch-speaking custom support chatbot, using DialogFlow and Python

### **Computational Linguist**

NCEM, Moscow

python • Sklearn • ML • NER • web-crawling • databases

August 2016-August 2017

Core member of AI development team working on building a social media monitoring system.

- Build several domain-specific text classifiers
- Developed an annotation work flow and guidelines
- Developed news content-based clusterisation system
- Improved Named Entity Recognition
- Worked on key word extraction

### Junior Web Developer

TT-Consult, Remote

HTML • PHP • SEO • web crawlers

June 2014-August 2016

Editing content, debugging code, re-designing the website and doing Search Engine Optimisation.

### **Education**

Masters of Artificial Intelligence
Radboud University

Bachelor of Computational Linguistics
National Research University Higher School of Economics

Exchange student, Computational Linguistics
University of Helsinki

Helsinki
2015–2016

## **Skills**

- o Programming Languages: Python, R, Matlab
- o ML and NLP: NLTK, pandas, gensim, SpaCy, Sklearn, Tenserflow, WEKA, padatious
- Word embeddings: Word2Vec, FastText, MUSE, VecMap

Chatbots: LUIS, DialogFlowData annotation: Toloka, Tagtog

o Web-development: HTML, CSS, JavaScript, Flask, Scrapy

o Databases: MySQL, SQLite, MongoDB, PostgreSQL

o Other: LATEX, Jupyter Notebook, git, bash, Linux, PRAAT, ELAN

 Sentimental Analysis, Chatbots, Word sense disambiguation (WSD), Topic modeling, Named Entity Recognition (NER), Web-crawling, Text classification and clusterisation, Dupplicates detection, Sequence labelling, Information Retrieval, Automatic text summarisation

# **Projects**

- **Resume Chatbot** [Link] The chatbot answers simple interview-like questions about me. Built with Python, Flask and DialogFlow.
- o **Telegram Chatbot for data annotation** [Link] The chatbot interacts with users and by asking simple questions collects data annotations that can later be used to train machine learning models for text mining. Built with Python, Telegram and Sqlite3.
- Web app for practising Russian Web app that automatically generates language tests for practising Russian.
   Built with Python and Flask.

# **Academic experience**

Conferences.....

PyData Amsterdam [Video]

Amsterdam

"How to expand your NLP solution to new languages using tranfer learning"

May 2019

**CLIN29 Conference** 

Groningen

"Best practices for learning domain specific cross-lingual embeddings"

January 2019
Nizhnyj Novgorod

**Conference ConCort on Digital Humanities** 

"Instruments of Quantitative Typological Research"

October 2016

#### Publications.....

Best practices for learning domain-specific cross-lingual embeddings, 2019 [Link]
 Shakurova L., Nyari B., Li C., Rotaru M.
 Proceedings of Repl4NLP workshop, ACL conference

Universal Dependencies for Russian: A New Syntactic Dependencies Tagset, 2016 [Link]
 Lyashevkaya O., Droganova K., Zeman D., Alexeeva M., Gavrilova T., Mustafina N. and Shakurova E.

### **Additional Information**

### Language Skills.

o Native: Russian

• Advanced: English (C1 CEFR Level, CAE)

Intermediate: German, DutchBasic: Spanish, Finnish, French

#### **Awards**

- o Orange Tulip Scholarship Russia 2017 awardee
- o T500 2018 list of 500 most talented young people in the Dutch digital scene

#### Extra activities

President of Language Exchange Committee, ISN Nijmegen, 2017 - 2018

Programming · Travelling · Music · Psychology · Literature

Interests.