# Lena Shakurova | NLP Engineer & Chatbot Developer

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Experienced Chatbot Developer and 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

**Self-employed Chatbot Developer & NLP Engineer**  **Pars Labs, Netherlands**
*deep learning • machine learning • python • rasa • dialogflow*  *April 2018–present*

Working on long-term projects as an NLP specialist and Chatbot Developer.
- Research on intent detection and named entity recognition approaches for an HR chatbot (Python, LUIS, padatious)
- Developed an English-speaking automated voice attendant chatbot (DialogFlow)
- Worked on the annotation project for Aspect-Based Sentiment Analysis task (Prodigy)
- Chatbot consultant for a healthcare chatbot (DialogFlow)
- Building a language learning chatbot assistant (Rasa)

**NLP Architect & Chatbot Developer**  **COIN, Remote**
*python • DialogFlow • conversation design*  *August 2019–December 2019*

Working in a team as an NLP Architect  Chatbot expert building a financial chatbot assistant.  Took part in re-architecturing the chatbot, worked on developing a strategy for expanding the chatbot to new languages and new communication platforms, improved the workflow and was guiding the chatbot development process.

**NLP Research Engineer intern**  **TextKernel, Amsterdam**
*sequence labelling • transfer learning cross-lingual embeddings • tensorflow*  *November 2018–July 2019*

Working full-time in a document understanding team, 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

**Chatbot Developer**  **United Wardrobe, Remote**
*python • DialogFlow*  *April 2018–October 2018*

Developed a prototype of a Dutch-speaking customer support chatbot.

**NLP Engineer**  **NCEM, Moscow**
*python • machine learning • Sklearn • NER • web-crawling • databases*  *August 2016–August 2017*

Core member of AI development team working full-time on building a social media monitoring system.
- Built 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** — **Nijmegen**, *2017–2019*
*Radboud University*

○ **Bachelor of Computational Linguistics** — **Moscow**, *2013–2017*
*National Research University Higher School of Economics*

○ **Exchange student, Computational Linguistics** — **Helsinki**, *2015–2016*
*University of Helsinki*

# Skills

○ **Programming Languages:** Python, R
○ **Web-development:** HTML, CSS, JavaScript, Flask, Scrapy
○ **ML and NLP:** SpaCy, NLTK, pandas, gensim, Sklearn, TensorFlow, WEKA
○ **Word embeddings:** Word2Vec, FastText, MUSE, VecMap
○ **Chatbots:** Rasa, DialogFlow, LUIS, padatious
○ **Data annotation:** Prodigy, Toloka, Tagtog
○ **Databases:** MySQL, SQLite, MongoDB, PostgreSQL
○ **Other:** LaTeX, Jupyter Notebook, git, bash, Linux
○ Sentimental Analysis, Chatbots, Word sense disambiguation (WSD), Topic modelling, Named Entity Recognition (NER), Web-crawling, Text classification and clusterisation, Duplicates 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.
○ **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**, *May 2019*
*"How to expand your NLP solution to new languages using transfer learning"*

○ **CLIN29 Conference** — **Groningen**, *January 2019*
*"Best practices for learning domain specific cross-lingual embeddings"*

○ **Conference ConCort on Digital Humanities** — **Nizhnyj Novgorod**, *October 2016*
*"Instruments of Quantitative Typological Research"*

## 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

○ **Native:** Russian
○ **Advanced:** English (C1 CEFR Level, CAE)
○ **Intermediate:** German, Dutch
○ **Basic:** Spanish, Finnish, French

## Awards

- **Orange Tulip Scholarship Russia** 2017 awardee
- **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

## Interests

Programming · Travelling · Music · Psychology · Literature