

# 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 5 years of professional experience applying NLP methods to real-world challenges across different domains.

## Work Experience

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- **NLP Engineer** **Similar.ai, Netherlands**  
*July 2020–present*  
*machine learning • python • django • web-crawling*  
Developing SEO platform helping big marketplace companies rank higher on Google.
- **Self-employed Chatbot Developer & NLP Engineer** **Pars Labs, Netherlands**  
*April 2018–present*  
*deep learning • machine learning • python • rasa • dialogflow • manychat*  
Working on long-term projects as an NLP specialist and Chatbot Developer.
  - Research on intent detection and named entity recognition approaches for chatbots
  - Working both with voice and text-based chatbots
  - Giving consultations and recommendations on chatbot development (healthcare chatbot, mental health chatbot, financial assistant)
  - Designing and developing chatbots from scratch using Rasa, DialogFlow and ManyChat(language learning chatbot, HR chatbot)
  - Reviewing and improving existing conversation flows and chatbot implementations (property rental assistant, financial assistant)
  - Managing chatbot development processes (financial assistant)
  - Giving workshops and tutorials on chatbot development (Rasa and DialogFlow)
- **Chatbot Developer & Co-founder** **Spok, Remote**  
*December 2019–February 2021*  
*python • rasa • architecture*
  - Freelancer (December 2019 - September 2020)
  - Co-founder (September 2020 - February 2021)At Spok, we have been building a language-learning e-tutor. I was responsible for the technical implementation of the chatbot from scratch. This involved designing the chatbot, setting up the project architecture and doing the implementation itself. I was in charge of training the assistant, labelling the data, adding new features and iteratively improving it.
- **NLP Architect & Chatbot Developer** **COIN, Remote**  
*August 2019–December 2019*  
*python • DialogFlow • conversation design*  
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** **TextKernel, Amsterdam**  
*November 2018–July 2019*  
*sequence labelling • transfer learning cross-lingual embeddings • tensorflow*  
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**  
*April 2018–October 2018*  
*python • DialogFlow*  
Developed a prototype of a Dutch-speaking customer support chatbot.
- **NLP Engineer** **NCEM, Moscow**  
*August 2016–August 2017*  
*python • machine learning • Sklearn • NER • web-crawling • databases*  
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**  
*June 2014–August 2016*  
*HTML • PHP • SEO • web crawlers*  
Editing content, debugging code, re-designing the website and doing Search Engine Optimisation.

## Education

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- **Masters of Artificial Intelligence** **Nijmegen, Netherlands**  
*2017–2019*  
*Radboud University*
- **Bachelor of Computational Linguistics** **Moscow, Russia**  
*2013–2017*  
*National Research University Higher School of Economics*
- **Exchange student, Computational Linguistics** **Helsinki, Finland**  
*2015–2016*  
*University of Helsinki*

## Skills

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- **Programming Languages:** Python
- **Chatbots:** Rasa, DialogFlow, ManyChat, LUIS
- **Web-development:** HTML, CSS, JavaScript, Flask, Scrapy, Django
- **Data annotation:** Prodigy, Toloka, Tagtog, Snorkl
- **Databases:** BigQuery, MySQL, SQLite, MongoDB, PostgreSQL
- **Data visualisation:** DataStudio, ChartJS
- **ML and NLP:** SpaCy, NLTK, pandas, gensim, Sklearn, TensorFlow, WEKA
- **Word embeddings:** Word2Vec, FastText, MUSE, VecMap
- **Other:**  $\LaTeX$ , Jupyter Notebook, git, bash, Linux, luigi
- 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

## Projects

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- **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

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- 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**  
"Instruments of Quantitative Typological Research"

Nizhnyj Novgorod  
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](#)]  
Lyashevskaya O., Drogonova K., Zeman D., Alexeeva M., Gavrilova T., Mustafina N. and Shakurova E.

## Additional Information

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#### Language Skills.....

- **Native:** Russian
- **Advanced:** English (C1 CEFR Level, CAE)
- **Intermediate:** German, Dutch (B1-B2)
- **Basic:** Spanish, Finnish, French

#### Awards.....

- **Orange Tulip Scholarship Russia 2017** awardee
- **T500 2018 2021** - list of 500 most talented young people in the Dutch digital scene

#### Extra activities.....

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

#### Interests.....

Travelling · Music · Psychology · Literature