



# Mikhail Ternyuk

Machine Learning Engineer



## Summary

Software Developer with overall 8+ years of work experience. In recent 3 years studying machine learning algorithms, statistical analysis, and deep neural networks. Recently obtained **MSc degree in Artificial Intelligence** in Utrecht University. My main focus lies in ML and DL model development, improvement and applying them to actual applications. I made the research on **Knowledge Graph** construction and **relation prediction** problem in Natural Language Processing (NLP) tasks such as Knowledge Graph Completion (KGC), Question Answering (Q/A), Recommender Systems and Text Summarization. Previously worked as a developer and project manager of business automation software on platform 1C: Enterprise (<https://1c-dn.com/>).



## Experience

08/2018 - present

### Machine Learning Engineer

- Building, training, fine-tuning, and evaluating **NLP models leveraging RNN\LSTM and Transformers (T5, GPT2, BERT)** for various sequence-to-sequence tasks such as Q&A, text summarization, language translation. Performing text preprocessing: NER, tokenization, stemming, POS tagging, etc.
- **Information extraction** and constructing **Knowledge Graphs** from unstructured text using attention matrix in BERT (GPT-2). Solving Knowledge Graph problems such a **Link Prediction** and **Completion** using transformer architecture.
- Designing **AI powered text assistant** on Python using **NLTK, Numpy, Pandas, Scikit-learn, spaCy libraries**. Specifically, implementing **ML models (LR, Random Forest) and DNN (TensorFlow)** for user's utterance classification. Performed optimization and statistical analysis of the resulting models.
- Implementing ML models for **sentiment analysis** task. Hyperparameters tuning and statistical analysis of classification models (Naive Bayes, Logistic Regression, Random Forest, SVM).
- Developing an **intelligent agents** for ATARI GAMES on Python using **OpenAI Gym**. Built **Deep Q-Learning algorithm** based on CNN. Optimization of learning algorithm with **Prioritised Experience Replay**.

09/2018 - 08/2019

### Junior ML Engineer

- BIA-Technologies, LLC
- Data preprocessing and vizualisation
  - ML algorithms assessment for particular business tasks, such as best logistic paths classification, automatic sorting items (trunk loader)
  - Implementing Python scripts for WEB-Services

03/2017 - 08/2018

### Software Developer

- BIA-Technologies, LLC
- WEB-services (SOAP, REST) developing on 1C: Platform 8.x
  - Improving and supporting business automation software of high-loaded distributed systems
  - Implemented the project of corporate e-documents storage according to government standards

06/2015 - 02/2017

### Project Manager

- FIRST BIT, LTD
- Designing of implementation strategy of 1C: Enterprise automation system (personal interviewing, selection of suitable configurations, formalising the software optimisation requests)
  - Designing technical tasks and resources planning (MS Project)

03/2012 - 05/2015

### Programmer-consultant

- FIRST BIT, LTD
- Improving 1C: Platform ver. 7.7 and 8.X configurations
  - Setting up and tuning 1C: Enterprise business software
  - Developing and optimising modules on 1C: Platform ver 7.7 and 8.X



## Personal Info

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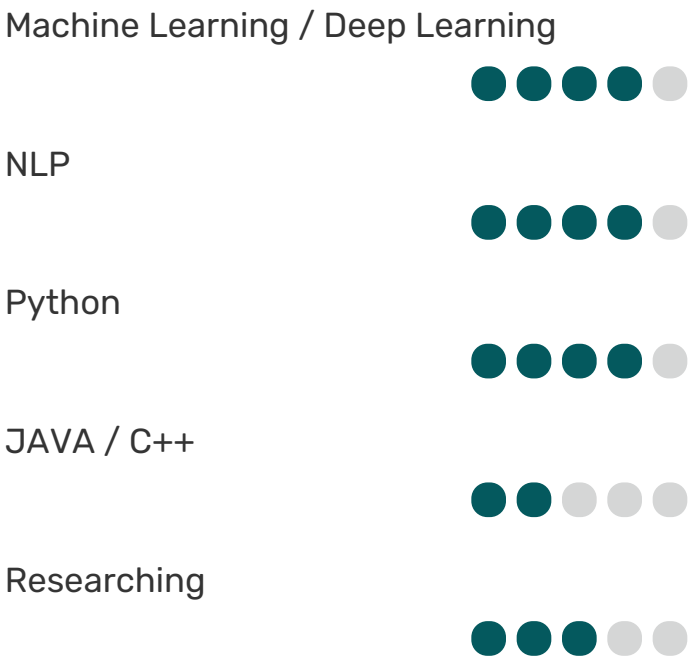
**Date of birth**  
07/12/1986

**WWW**  
<https://github.com/MikerT86>

**LinkedIn**  
<https://www.linkedin.com/in/mikhail-ternyuk-71070247/>



## Skills





## Education

09/2019 -  
present



### MSc in Artificial Intelligence (Utrecht University)

- Researching in NLP
- Relevant courses passed: NLP, Data Mining, Pattern recognition, Methods of AI, Intelligent Agents, Multi-Agent Systems
- Reinforcement learning

09/2004 -  
07/2011



### MSc in Computer Science (Lomonosov Moscow State University)

**Specialisation:** Applied mathematics and informatics

**Qualification:** Mathematician, system programmer