Moscow, Russia

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EXPERIENCE

Research Fellow — **Russian Quantum Center** — **January 2018 — Present**

- Quantum Computing
- Quantum Machine Learning

Teaching Assistant — **Laboratory of Neural Networks and Deep Learning** — **March 2017 — Present**

- Responsible for preparing practical and theoretical assignments for the course of Reinforcement Learning and theoretical assignments for the course of Natural Language Processing with the number of 100+ enrolled students each.

Research Assistant — **Laboratory of Functional analysis of the Genome** — **June 2016 — Present**

- Text mining, Natural language processing, Keyword extraction, Machine learning algorithms. As an intermediate result the new method of keywords extraction using Information Theory proposed (ResearchGate).

Data Scientist — **Sberbank-Technology** — **August — October 2017**

- Responsible for NLP projects. Participated in preparing the datasets and building baselines for competition Sberbank Data Science Journey which is based on SQuAD.
- Developed an analogue of Amazon Mechanical Turk to improve experience of colleagues who evaluated the quality of collected datasets (Python, Flask).

EDUCATION

Moscow, Russia — **Moscow Institute of Physics and Technology** — **September 2014 — August 2018 (expected)**

- B.Sc. in Computer Science and Physics, Department of Innovation and High Technologies
- Coursework for the state qualification exam in Physics at MIPT: “Molecular dynamics” [Code]
- Undergraduate Coursework: “Advanced toolkit for biomedical texts processing”

TECHNICAL EXPERIENCE

Projects

• **Frontopolar** (2017). Applied Reinforcement Learning for Stock Trading. State of the art results were reached. Different approaches were tested including Q-learning and Recurrent Reinforcement Learning.

Contributed to Open source

- Gensim - fixed issue #671
- yandexdataschool/Practical_RL - PR #12

SKILLS

- **Russian:** native, **English:** fluent, **German:** basics (A2)
- **Programming languages:** Python, C/C++, bash, R, experienced with SQL
- **Python libraries:** numpy, sklearn, pandas; **for NLP:** NLTK, Gensim; **for Deep Learning**: TensorFlow, PyTorch
- Experimented with RaspberryPi and Arduino. Projects
- Started ”MIPT Deep Learning Club” to discuss and share ideas on deep learning topics

PUBLICATIONS

“Generative Adversarial Networks (GANs): Engine and Applications” — **August 2017**
Medium Story

"Advanced Parser for Biomedical Texts" **July 27 — 30, 2017**
Moscow Conference on Computational Molecular Biology, Poster, Thesis

TEACHING

Deep Reinforcement Learning **October 2017 — Present**
course at MIPT, based on rll.berkeley.edu/deeprlcourse/
Practical assignments

Deep Learning in Natural Language Processing **March 2017 — Present**
course at MIPT, based on cs224n.stanford.edu
Practical assignments

ADDITIONAL EDUCATION

"Summer school on Bayesian Methods in Deep Learning"	**DeepBayes Summer School**	**August 26 — 30, 2017**
"Big Data in Bioinformatics"	**Bioinformatics Summer School**	**July 31 — August 5, 2017**
"Natural Language Processing"	**DeepHack Lab**	**September — December 2016**

HACKATHONS

Aalto University, Helsinki **Junction** **November 24 — 26, 2017**

- LegalEngine - website/telegram chat-bot/email notification system, "qqmbr" team member, challenge by Castrén & Snellman
- Proposed solution makes the client-attorney interaction easier with the use of telegram chat-bot and email notifications, the attorney's work and billing more transparent to the client
- Python, Flask library, html, css

EPFL, Lausanne **LauzHack** **November 11 — 12, 2017**

- 1st place in challenge by SGS, "NN:Nerds" team member, Presentation, Devpost
- Solution allows quick access to the main concepts found in documents
- Python, IBM Watson API for Natural Language Understanding

Phystechpark, Moscow **mABBYYlity** **October 7 — 8, 2017**

- 4th place, "App in the Restaurant" iOS application, Demo, Presentation
- App allows to recognise entities from restaurant menus using smartphone's camera and translates them. ABBYY Real-Time Recognition SDK, ABBYY Lingvo API and Spoonacular API were used
- Python, Flask library

Skolkovo Moscow School of Management, Moscow **Neurocampus** **September 22 — 24, 2017**

- 2nd place, @SenseOfSpeech_bot telegram-bot, Presentation
- Proposd solution allows to extract emotions from user's recorded speech. Also it helps to train selected emotion with samples from TED talks
- Python, Telegram API

ITMO, Saint Petersburg **BioHack** **March 3 — 5, 2017**

- Python, Text Mining, parsing the records from PubMed and UMLS.
- Analysis of research trends of chemical compounds and diseases during period of 1990-2015 using parsed information from PubMed database. Project