

## EDUCATION

- **Master of Science in Applied Mathematics and Informatics**, GPA 3.90 / 4.0 *Sep 2019 – Jun 2021*  
[Higher School of Economics](#) : Faculty of Computer Science  
Joint programme with [Yandex School of Data Science](#)
- Bachelor of Science in Applied Mathematics and Computer Science, GPA 3.89 / 4.0 *Sep 2015 – Jun 2019*  
[Lomonosov Moscow State University](#)  
Faculty of Computational Mathematics and Cybernetics

## EXPERIENCE

- **Software Development Engineer at Amazon** *Aug 2021 – Aug 2022 · 1yr*  
**Alexa TextToSpeech** C C++ Python Bash Perl CI/CD
  - Worked on various projects in text normalization for Speech Synthesis in various languages
  - **Reduced latency** of a model for homograph disambiguation by **56%**
  - **Urgently fixing bugs** with wrong pronunciation helping to **deliver projects on time**
  - Extended functionality of an internal library for integration testing in Speech Synthesis **making it simple** to execute various new testing scenarios
- **Research Science Intern at Yandex** PyTorch NumPy Pyplot L<sup>A</sup>T<sub>E</sub>X *Sep 2020 – Jun 2021 · 9mo*
  - Comparing existing methods for **uncertainty estimation** on large-scale tasks
  - Finding **theoretical foundations** for various methods of uncertainty estimation in **Deep Learning**
  - **Results** are described in the [Master's thesis](#)
- **Machine Learning Engineer Intern at Yandex** *Jun 2019 – Sep 2019 · 3mo*  
**Machine Translation department** TensorFlow MapReduce SciPy Pyplot
  - Conducted experiments to improve quality and diversity of translations
  - Analyzed baseline approaches and found some basic mistakes that they make
  - **Increased quality and diversity** by internal company's metrics and by commonly used machine translation metrics: **10% of max-BLEU growth** and about **60% of self-BLEU diversity growth**
  - Implemented several models in company's internal machine learning library
- **Software Engineer Intern at Yandex** *Jun 2018 – Oct 2018 · 3mo*  
**Voice Technology department** C++ Python MapReduce Protobuf
  - Implemented several methods of probability smoothing in language models for Automatic Speech Recognition
  - Conducted experiments on quality measurement to find the best model among all
  - Implemented an optimal algorithm for training n-gram language models in C++ using MapReduce which **reduced training time by 3 times and slightly increased quality**

## PROJECTS

- **BigARTM** C++ Boost Protobuf Travis CI AppVeyor *Jan 2017 – Jun 2018*  
**Open Source library for topic modelling**  
Developed a tool for parallel calculation of pairwise word statistics ([code sample](#), [documentation](#))

## SKILLS

- **Languages:** C++, Python, C, Bash, Perl
- **Deep Learning frameworks:** PyTorch, TensorFlow, Keras
- **Technologies/Libraries:** MapReduce, Protobuf, C++ Boost, Make, NumPy/SciPy, Sklearn, Pandas, CVXPY
- **Tools:** Git, UNIX/Linux, GDB, Docker, L<sup>A</sup>T<sub>E</sub>X, Deployment Pipelines (CI/CD), Travis CI, AppVeyor