

# Roman Poletukhin

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## HIGHER EDUCATION

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### Technical University of Munich (TUM)

*Master of Science, Mathematics in Data Science*

Current CGPA: 1.86

*April 2023 – Now*

### Moscow Institute of Physics and Technology (National Research University)

*Bachelor of Science, Applied Mathematics and Computer Science*

CGPA 4.42/5.00 (German GPA: 1.8), including 5.00/5.00 (German GPA: 1.0) at both Bachelor's Thesis and Final State Exam in Mathematics.

*Sept 2018 – July 2022*

## WORK EXPERIENCE

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### R&D Data Science Working Student @ Ariadne

*Oct 2023 – Now*

Working in the Research & Development department on implementing the company's custom solution to the offline map-matching problem for very sparse and noisy data. The current baseline approach features a sequential application of the FMM algorithm, which is based on hidden Markov models, for several heuristical topologies with intermediate data processing. Future work will involve a limited collection of ground-truth data and implementation of the Transformer-based architecture.

### Junior Data Scientist @ MegaFon PJSC

*Sept 2022 – Jan 2023*

Experience as a Junior Data Scientist includes preprocessing of raw data, development of ML pipelines, analysis and visualization of results. Furthermore, I worked with PySpark and tuned/debugged models in the existing MLOps solution.

### Data Science Intern @ MegaFon PJSC

*May 2022 – Aug 2022*

Worked in the Department of Machine Learning and Big Data Analysis on a project in the field of natural language processing (NLP). The project was aimed at analyzing and getting insights from transcripts of business-to-business (B2B) marketing conversations.

The pipeline was mainly focused on data preprocessing, misspelling correction, transfer learning, and fine-tuning of BERT. I was promoted to the position of Junior Data Scientist due to excellent performance & results during the internship.

## COMPETENCES

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- **Python 3:** PyTorch, numpy, scipy, pandas, sklearn, matplotlib, seaborn, etc.
- **SQL:** PL/SQL, T-SQL
- **Other:** Git, Hadoop, PySpark, Hive, LaTeX
- **Languages:** English (IELTS 8.0/9.0), French (DELFB1), Russian (Native)

## PROJECTS, ACHIEVEMENTS & EXTRACURRICULAR COURSES

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### Coursera Courses on Data Science and Machine Learning

*Feb 2022 – Now*

In particular, the following: Python specialization by VK, Machine Learning and Data Analysis specialization by Yandex, Computer Vision and NLP courses by Samsung Research.

### First prizes at the MIPT Scientific Team Contests

*Dec 2018, May 2019*

The first project: comparison of simplified analytical approach with mathematical modeling based on the Runge-Kutta methods in Python for the  $n$ -body problem in application to the Solar System.

The second project featured a numerical simulation of various models of gases in Python.

### MIPT Summer Olympiad School

*July 2017*

Participation in an intensive summer school at Moscow Institute of Physics and Technology aimed to prepare for international olympiads in Mathematics, Computer Science and Physics.

### Studies at Distant School of

### Moscow Institute of Physics and Technology (ZFTSh)

*Sept 2014 – July 2018*

Complementary Education in Mathematics, Computer Science, and Physics.

Diploma with Highest Honors, GPA 5.00/5.00 (German GPA: 1.0)