

Kirill Korolev

RESEARCH SCIENTIST

Moscow, Russia

+79167457296 | kkorolev@hse.ru | GitHub | LinkedIn | Google Scholar

Personal Profile

M.Sc. in Mathematics of Machine Learning and B.Sc. in Applied Mathematics and Computer Science from HSE University, Moscow. Machine learning researcher working at the intersection of generative modeling, reinforcement learning, and probabilistic inference. My research focuses on developing scalable algorithms for sampling, generative modeling, with recent work on entropy-regularized reinforcement learning and diffusion-based samplers.

I am broadly interested in generative models, reinforcement learning, diffusion models, Monte Carlo methods. My work combines theoretical analysis with practical algorithm design.

Education

Higher School of Economics

Masters Degree "Math of Machine Learning"

- GPA 9.5

Moscow, Russia

Sept 2024 - June 2026

Higher School of Economics

Bachelor Degree in Applied Math and Computer Science

- GPA 8.27

Moscow, Russia

Sept 2020 - June 2024

Yandex School of Data Analysis

Moscow, Russia

Sept 2022 - June 2024

Work Experience

HDI Lab

Research intern under supervision of **Sergey Samsonov**

- Research on diffusion-based samplers, adaptive MCMC, and Monte Carlo estimation.
- Developing sampling algorithms for bounded domains and high-dimensional integration.

Moscow, Russia

Mar 2025 - Present

Glam AI

Computer vision engineer

- Developed diffusion-based virtual try-on systems and personalization pipelines.

Moscow, Russia

Aug 2024 - Mar 2025

Yandex Research

DL engineer & researcher

- Conducted research on diffusion models and large-scale retrieval systems.
- Developed transformer-based retrieval, ranking, and LLM-powered search components.

Moscow, Russia

Jun 2023 - Jun 2024

Huawei Russian Research Institute

DL engineer

- Applied computer vision and model compression techniques to video processing systems.

Moscow, Russia

Nov 2022 - May 2023

Higher School of Economics

Seminar tutor

- Taught seminars in Deep Learning, Linear Algebra, and Statistics.

Moscow, Russia

Sep 2021 - Dec 2025

Publications & Projects

Stop the Sampler! Classifier-Based Adaptive Stopping for Sampling Kernels

- Accepted to ICML 2026 SPIGM Workshop and submitted to NeurIPS 2026. **Source code.**

May 2026

Thesis "Development of domain adaptation methods for generative models"

- An encoder based approach for adapting a GAN for a new domain. **Source code.**

May 2024

Achievements

2024 **2nd Degree Diploma**, Skoltech-HSE Olympiad Math of Machine Learning

Moscow, Russia