# Nikita Kiselev

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 ☑ Google Scholar
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Data Scientist, Optimization Researcher

### **WORK EXPERIENCE**

#### Sber AI

Kandinsky 4.1 (text-to-video, image-to-video):

- Text-to-video LoRA fine-tuning for 70+ characters from Russian culture code, distilled them into one model
- Developed and trained a new image-to-video model maintaining structural dynamics

*Research Intern* ...... *Jun* 2024 – *Dec* 2024

Kandinsky Image Editing:

- Interior Design with Kandinsky 3 ControlNet for Domclick
- Kandinsky 3 ControlNet Style (DepthPro) that outperforms ControlNet Union SDXL by 100% on ImageReward

 Laboratory of Mathematical Methods of Optimization, MIPT

 Technician
 Oct 2023 – Apr 2024

# **FEATURED PUBLICATIONS**

- D. Yarmoshik, A. Rogozin, N. Kiselev, D. Dorin, A. Gasnikov, D. Kovalev. Decentralized Optimization with Coupled Constraints. // ICLR 2025, A\*
- D. Dorin, N. Kiselev, A. Grabovoy, V. Strijov. Forecasting fMRI Images From Video Sequences: Linear Model Analysis. // Health Information Science and Systems, Q1
- 3. N. Kiselev, A. Grabovoy. Unraveling the Hessian: A Key to Smooth Convergence in Loss Function Landscapes. // Doklady Mathematics, Q2

## **FEATURED TALKS**

April 6, 2024. Determining a sufficient sample size based on the a posteriori distribution of model parameters. // 66th MIPT All-Russian Scientific Conference.

#### FEATURED ACHIEVEMENTS

- K.V. Rudakov scientific academic scholarship for research activities in the field of applied mathematics:
  - Spring 2024 2025, Fall 2024 2025, Fall 2023 2024
- Personal scholarship for contributions to the development of numerical optimization methods:
  - **-** 2023 2024, 2024 2025
- Abramov scholarship for 1-3 year bachelor students with the best grades at MIPT:
  - **-** 2020 2023

#### **SUMMARY**

Aspiring researcher (2+ years of research experience) in the field of machine learning and optimization. Focused on generative diffusion and multimodal models. Motivated for productive work and learning. Having a substantial theoretical foundation and mathematical background.

### **SKILLS**

DL: PyTorch, Huggingface,
Accelerate, Multi GPU training:
DDP/FSDP/SP/TP, W&B,
TensorBoard

ML: NumPy, SciPy, Pandas, NetworkX, Scikit-learn, LightGBM, CatBoost

OS: macOS, Linux, Windows

Misc.: Git, Bash, LATEX

**Soft:** responsible, organized, critical thinker, flexible, communicative, team player, patient

# **EDUCATION**

MIPT ...... Moscow, Russia

MSc in Computer Science

Sep 2024 – Present

MIPT ...... Moscow, Russia
BSc in Applied Mathematics and Physics
Sep 2020 – Aug 2024

 Thesis: Bayesian Sample Size Estimation

o Advisor: Andrey Grabovoy, PhD

OGPA: 4.88/5 (with honours)

#### LANGUAGES

- o Russian (Native)
- English (Advanced)

### **INTERESTS**

- o Gym
- Guitar