

# Nikita Kiselev

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## EDUCATION

### Moscow Institute of Physics and Technology

*BSc in Applied Mathematics and Physics*

Moscow, Russia

Sep 2020 – Present

- Thesis: Bayesian Sample Size Estimation  
Advisor: Andrey Grabovoy
- GPA: 4.88/5 (8.91/10)

## WORK EXPERIENCE

### Laboratory of Mathematical Methods of Optimization, MIPT

*Technician*

Moscow, Russia

Oct 2023 – Apr 2024

## PUBLICATIONS

### Submitted.....

- N. Kiselev, A. Grabovoy  
Sample Size Determination: Posterior Distributions Proximity  
Journal of Computational and Applied Mathematics

## TALKS

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

## PROJECTS

### Research.....

- Bayesian Sample Size Estimation  
Posterior distributions proximity and likelihood estimation in the problem of sufficient sample size determination
- Forecasting fMRI Images From Video Sequences: Linear Model Analysis  
Using linear models and testing hypotheses about the relationship between data

### Educational.....

- Models of epidemic spread, in particular COVID-19 as a model of stochastic chemical kinetics  
Various approaches to modeling the spread of epidemics, differential equations and Markov processes

- **Optimization methods for quadratic problems with large dimensionality**  
Comparison of different methods of solving high-dimensional linear regression problems
- **Intelligent Presentation Generator**  
Application for generating presentations based on text files using topic modeling

## SCHOLARSHIPS, HONORS AND AWARDS

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

## SKILLS

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- **Research interests:** Machine Learning, Optimization
- **Maths:** Statistics, Probability, Algorithms, Calculus, Linear Algebra
- **Programming:** Python, C, C++, Git
- **LaTeX**
- **Operating Systems:** Mac OSX, Linux, Microsoft Windows

## LANGUAGES

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- **Russian:** mother tongue
- **English:** B2

## INTERESTS

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- **Going to the gym**
- **Playing the guitar**

*Last updated on April 11, 2024*