

# Kirill Grinko

## Personal

Hard skills C++, Algorithms & data structures, Concurrency, C, Assembly x86-64, Python, LaTeX, Git, CMake, Gitlab CI/CD, GoogleTest, Bash, Docker, Qt, SFML.

Soft skills Hard-working, Quick-learning, Organised, Outgoing and collaborative.

Languages English (B2), Chinese (A1), Russian (native speaker).

Hobbies Calisthenics, skiing, cycling, piano.

## Projects

Spring 2025 **Kaks Database**, *Github page (clickable)*, Used tools: C++, CMake, GoogleTest  
Relational database implementation (group project, work in progress...).

Fall 2024 – **C++ course homework**, *Github page (clickable)*, Used tools: C++  
Spring 2025 Implementations of standard library data structures and solutions to various programming problems.

Fall 2024 **Graphing Calculator**, *Github page (clickable)*, Used tools: C++, SFML, CMake  
A graphing calculator and plotter application.

Fall 2024 **Algorithms and data structures course homework**, *Github page (clickable)*,  
Used tools: C++  
Solutions to competitive programming problems and implementations of various algorithms.

Spring 2024 **Box with molecules**, *Github page (clickable)*, Used tools: C++, Qt, CMake  
A simulation of an ideal gas in an enclosed space, including a small research component to test the validity of the Maxwell distribution.

Fall 2023 – **Physics Laboratory Works**, *Github page (clickable)*, Used tools: LaTeX, Python  
Spring 2024 A collection of completed laboratory works in physics, including theoretical calculations, experimental data analysis, and visualizations using Python.

Fall 2023 **MBTI test**, *Github page (clickable)*, Used tools: Python, Qt, SQL  
A program for taking the Myers–Briggs Type Indicator (MBTI) personality test.

Fall 2023 **Text editor**, *Github page (clickable)*, Used tools: Python  
A simple text editor designed for use in an internet browser.

## Education

2023 – present **Moscow Institute of Physics and Technology**, *finished 3rd semester bachelor*,  
Overall GPA 8.5/10, Programming courses GPA 8.83/10  
Phystech School of applied Mathematics and Informatics.

2019 – 2023 **Moscow State School 57**, *8-11 grade*, GPA 5/5  
Focus on physics and math. Graduated with federal and Moscow gold medals.

## Achievements

2022 – 2023 All-Russian Olympiad for schoolchildren in physics (Final stage participant, top 80 in country); Phystech (MIPT) Olympiad in physics (Gold); Rosatom Olympiad in physics (Silver); Moscow Olympiad for schoolchildren in physics (Silver).

- 2021 – 2022 Rosatom Olympiad in physics and maths (Gold, Silver); All-Russian Olympiad for schoolchildren in physics (Regional stage prize winner); Phystech (MIPT) Olympiad in physics and maths (Silver, Silver).
- 2020 – 2021 All-Russian Olympiad for schoolchildren in physics (Regional stage prize winner); Moscow Olympiad for schoolchildren in physics (Silver).
- 2019 – 2020 International Experimental Physics Olympiad (Bronze); Moscow Olympiad for schoolchildren in physics (Silver).

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## Extracurricular activities

- 2019 – 2023 **Olympiad Physics Classes**  
Theoretical and experimental training for All-Russian Olympiad for schoolchildren in physics, organized by the Moscow City Department of Education.
- 2020 – 2022 **Yandex Lyceum**  
Python programming classes for high school students. [More info \(clickable\)](#).
- 2021 **QuSoft Quantum Quest**  
An online course on quantum computing for high school students, developed by Michael Walter and Māris Ozols. [More info \(clickable\)](#).

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## Courses taken

- MIPT Analytical Geometry; Introduction to Mathematical Analysis; General Physics: Mechanics; Algebra of Logic, Combinatorics, Graph Theory; Python Practicum; Linear Algebra; Multivariate Analysis, Integrals, and Sequences; General Physics: Thermodynamics and Molecular Physics; General Physics: Laboratory Practicum 1 – 2; Fundamentals of Higher Algebra and Coding Theory; Programming Technologies; Multiple Integrals and Field Theory; Fundamentals of Theory of Measure and Probability; Computer Architecture and Operating Systems; Discrete Structures 1; Differential Equations 1; Algorithms and Data Structures 1 – 2; Programming in C++ 1 – 2.