# 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 **Concurrency framework**, *Github page (clickable)*, Used tools: C++, CMake Lightweight framework for concurrency, 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).

## 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).

## 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.