Marina Romanova

EDUCATION

National Research University Higher School of Economics

Faculty of Computer Science, Applied Mathematics and Information Science

2021 — Expected 2025

Moscow, Russia

Yandex School of Data Analysis

2023 —Expected 2025

Specialisation of Data Science

Moscow, Russia

Independent University of Moscow

Took advanced Geometry, Calculus, and Algebra courses

Moscow, Russia

2021

PROJECTS

Image Filters ☑ | C++, CMake, GTest

March 2022

- Implemented CLI app for applying filters to images (like a blur, greyscale, sharpening, and crystallizing)
- Used complex class inheritance structure for better scaling and adaptation to different image formats
- Used Catch2 for unit testing and CMake as a build system

Exam Organizer 🗷 | Python, Django, HTML

November 2022

- · Website with attached database for organization of preparing and further sharing of the exam materials
- Used Django framework, SQLlite3 as database, HTML for web interface

 $\underline{\text{Vector}} \ \square \ | \ \underline{\text{C}} + +$ February 2022

- Implemented C++ STL vector container with dynamic memory allocation
- Implemented iterators to provide range-based support

WORK EXPERIENCE

Huawei Russian Research Institute

July — September 2022

Internship

Moscow, Russia

- Implemented numerical optimization methods based on Gradient Descent (BFGS, Powell's Dog Leg, Trust Region) and other methods (Nelder-Mead) myself and compared their performance
- Developed and optimized the mobile phone signal conversion model
- Used NumPy and SQNomad library for building model
- Improved original NMSE of signal conversion model by 50%

Online MIPT School

September 2021 — Present

Teacher

Moscow, Russia

- Gave Olympiad Maths lectures for a group of 15 middle school students
- Developed tasks and checked weekly assignments
- 5 out of 15 students became prizewinners winners of the regional stage of the National Olympiad in Math (top 5 in their region)

ACHIEVEMENTS

Russian Olympiad in Mathematics

2021, 2019, 2018

Top 50 (2021, 2019), top 70 (2018) out of over 200 000 participants

Russian Olympiad in Economics

2021, 2019

Winner - top 70 (2021), top 25 (2019) out of over 100 000 participants

Russian Olympiad in Physics

2021, 2019

Winner - top 25 (2019), Participant - top 70 (2021) out of over 100 000 participants