

# Maria Okorochkova

Email: [okorochkova26@gmail.com](mailto:okorochkova26@gmail.com)

Telegram: [@maladetska](https://www.instagram.com/maladetska)

Mobile: +7(961)624-24-62

St. Petersburg, Russia

GitHub: [maladetska](#)

## EDUCATION

- Bachelor of Science in Applied Mathematics and Computer Science**  
*National Research ITMO University* Sep. 2021 - Present  
**Relevant coursework:** Calculus, Algorithms and Data Structures, Discrete Mathematics, Java, C, C++
- Bachelor of Science in Information Systems and Technologies**  
*National Research ITMO University* Sep. 2020 - Aug. 2021  
**Relevant coursework:** Algorithms and Data Structures, Discrete Mathematics, C, C++
- Student**  
*Correspondence School of Physics and Technology of MIPT* Sep. 2018 - Jun. 2020  
**Relevant coursework:** Mathematics, Informatics

## SELECTED PROJECTS

- TAPE TYPE DATA SORTER** Feb. 2023  
**C++** **OOP** **Iterator** **Memory work**  
Tape (data structure) development and implementation of Tape Sorter.
- IMPLEMENTATION OF CODEFORCES'S CLONE** Dec. 2022  
**Java** **JavaScript** **Vue.js** **REST** **Spring** **MariaDB**  
Development of a web app similar to Codeforces with basic features:  
registration, identification, writing comments, publishing posts, storing data of each user.
- ARITHMETIC PARSER** Jun. 2022  
**Prolog** **Definite Clause Grammar** **Parsing**  
Parsing and calculation of arithmetic expressions in Prolog for developed DC-grammars.
- COMBINATORIAL PARSERS** May 2022  
**Clojure** **Functional Programming** **Parsing**  
Development of a parser and calculations in Clojure using special library.
- PNG TO PNM CONVERTER** Apr. 2022  
**C** **ZLIB** **LIBDEFLATE** **Decoding**  
Decoding a PNG image into PNM for ZLIB or LIBDEFLATE.
- RUBIK'S CUBE GRAPHICAL USER INTERFACE** Jun. 2021  
**C++** **OOP** **GLUT**  
Implementation of a program simulating the assembly of a 3x3 Rubik's Cube  
+ using application GUI Implementation (OpenGL Utility Toolkit).

## ACHIEVEMENTS

- |                      |  |             |
|----------------------|--|-------------|
| <b>Prize-winner,</b> | Mathematical Olympiad 'Phystech' held by MIPT ( <b>2nd prize</b> among 2000+ finalist)   | 2019 - 2020 |
| <b>Winner,</b>       | Mathematical Olympiad held by Financial University ( <b>top 25</b> among 580+ finalists) | 2019 - 2020 |

## PROGRAMMING SKILLS

- |                                |  |
|--------------------------------|--|
| <b>Languages:</b>              | C++, Java.                                       |
| <b>Languages, familiar:</b>    | C, JavaScript, Clojure, Prolog, Verilog, Python. |
| <b>Frameworks &amp; Tools:</b> | Bash, Git, Spring, Vue.js, MariaDB.              |
| <b>Technologies:</b>           | AJAX, REST.                                      |

## TEACHING EXPERIENCE

- Mentor**  
*ITMO University, Information Technologies and Programming Faculty* Sep. 2021 - Present  
**Calculus** **Teaching**
  - Mentor of Calculus for first-year students.

## LANGUAGES

- English**, Upper-Intermediate;  
**French**, Intermediate.