

# EKATERINA MOZZHEVILOVA

+7 (916) 973-91-35 | [kdedovich@ya.ru](mailto:kdedovich@ya.ru) | [github.com/kdedovich](https://github.com/kdedovich) | [t.me/kmozze](https://t.me/kmozze)

## EDUCATION

### MIPT

*Incomplete higher education. Phystech School of Applied Mathematics and Informatics.*

Dolgoprudny, Russia

2018 - 2020

### SPbSTU of Peter the Great

*Bachelor of Applied Mathematics and Computer Science*

Saint Petersburg, Russia

2021 - 2025

## WORK EXPERIENCE

### Yandex backend Development School (Java)

*Training and Internship*

June 2024 - August 2024

## PROJECTS

### Solving the problems of finding the maximum flow in a graph | C++

[GitHub: Sources](#)

- Developed the solution to the problem of finding the maximum flow in the network has been implemented.
- Two algorithms were used: Goldberg and also Malhotra - Kumar - Maheshwar.
- The final complexity of both algorithms  $O(V^3)$  (V is a number of vertexes in graph)
- Implemented Network storage class with traversal iterator
- The classes are templates
- It also has its own error system.

### Designing a Database for a Store | DDL / DML (PostgreSQL)

[GitHub: Sources](#)

- Designed database for a cosmetics retail store
- A logical database scheme with a description of entities and relationships has been developed
- The database is in Boyce-Codd Normal Form
- Also designed *view* to collect statistics from the database

### Building an NFA from a formal language | C++, gtest

[GitHub: Sources](#)

- An algorithm has been implemented that allows, according to the description of the formal language, to obtain the corresponding non-deterministic finite automaton
- Testing is carried out by means of the library *gtest*

## SKILLS

**Programming languages:** Java, Kotlin, SQL, C++, Python

**Technologies:** Spring, Hibernate, JUnit, Docker, git

**Knowledge:** Algorithms and data structures, Calculus and Analysis, Number theory, Linear Algebra, Mathematical Logic, Probability theory, Mathematical statistics

## TEACHING EXPERIENCE

### Olympiad Programming tutor

*Summer Olympic training school*

July 2019 — August 2019

*Innopolis University*

### Olympiad Programming tutor

*Faculty of Competitive Programming*

September 2019 — December 2019

*Phystech Lyceum*

## AWARDS

### Moscow quarterfinal ICPC

*47th place out of 277 participants*

2020

### The final stage of the All-Russian Olympiad for Schoolchildren in Informatics

*118th place out of 244 participants*

2018

### Moscow School Olympiad in Programming

*52th place out of 323 participants*

2018