

Niyaz Nigmatullin

niyaz.nigmatullin@gmail.com | +357 99813836 | [linkedin/niyaz-nigmatullin-6506561b6](https://www.linkedin.com/in/niyaz-nigmatullin-6506561b6/) | [github/niyaznigmatullin](https://github.com/niyaznigmatullin)

EDUCATION

M Sc, Computer Science

ITMO UNIVERSITY

St. Petersburg, Russia | Jun 2015

B Sc, Computer Science

ITMO UNIVERSITY

St. Petersburg, Russia | Jun 2013

WORK EXPERIENCE

JETBRAINS | SOFTWARE ENGINEER AND RESEARCHER | KOTLIN, JAVA, JVM

Cyprus | since Feb 2023

- Researching symbolic execution software testing, algorithm that does a test generation for a JVM bytecode.
- Implemented algorithm to explore different heap object states and generate test input using classes' public API.

HUAWEI | SENIOR SOFTWARE ENGINEER AND RESEARCHER | C/C++, ARM, LINUX

St. Petersburg, Russia | 2020 – 2022

- Researched and developed an algorithm to compress genome data.
- Made a target optimizations for ARM platform to reach target speeds, and 70% better than GZIP compression.
- Developed GZIP recompression framework, new features, code refactoring, partially-multithreaded processing.

ITMO UNIVERSITY | PROFESSOR |

St. Petersburg, Russia | 2015 – 2021

- Algorithms and Data structure professor
- Department chairman: curriculum designing, educational process maintenance.

VK | PART-TIME SOFTWARE ENGINEER | C/C++, LINUX, NETWORK, DATABASE

St. Petersburg, Russia | 2015 – 2018

- Created an index for a SQL-like database, using persistent data structure for multithreaded access.

OUTSIDE PROJECTS

ICPC LIVE

JAVA, OPENGL, WEB

A software to generate overlay for a competitive programming competition broadcast.

POLYGONCONTESTIMPORTER

JAVA, KOTLIN, MULTIPLATFORM

A software to automatically download and convert polygon.codeforces.com competitive programming problem data into PCMS2 format.

POLYGON UPLOADER

PYTHON

Automatic uploading programming contest problems from some websites to polygon.codeforces.com

ICPC WORLD FINALS

CONTESTANT

2012 and 2013 World Champion in a ITMO University team

INNOPOLIS OPEN

HEAD OF SCIENTIFIC COMMITTEE, PROBLEM DESIGNING

A programming olympiad for high-school students

COMPETITIVE PROGRAMMING CRASH COURSE

INSTRUCTOR, LECTURER

- ETH Zurich, Switzerland: 2015, 2016
- UCLA, United States: 2014, 2015, 2016, 2017
- Harbin U of Tech, China: 2014
- ITESM Monterrey, Mexico: 2015

COMPETITIVE PROGRAMMING JUDGE

PROBLEM DESIGNING

- ICPC Regionals: 2014 – 2022
- International Olympiad in Informatics: 2016
- Asia-Pacific Olympiad in Informatics: 2017, 2018
- Russian Olympiad in Informatics: 2014 – 2021

SKILLS

Languages: C/C++, Rust, Java, Kotlin, Python

Background: Algorithms, Optimizations, Databases

Technology: Git, Docker, \LaTeX , Linux