# Robert Oganyan

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#### **SUMMARY**

I have graduated in software engineering and now I'm studying machine learning. I also used to do competitive programming in the past. I like to learn something new every day, am a hard-worker.

#### **EDUCATION**

Nizhny Novgorod State Lobachevsky University (NNSU)

Bcs in Programming Engineering - GPA - 4.57

Sep. 2018 - Aug. 2022

Nizhniy Novgorod, RU

Yandex School of Data Analysis (YSDA)

Machine Learning Engineering - GPA - 4.15

Sep. 2021 - June 2023

Nizhniy Novgorod, RU

Nizhny Novgorod Higher School of Economics (HSE)

Applied Mathematics and Informatics - GPA - 9

Sep. 2022 - present

 $Nizhniy\ Novgorod,\ RU$ 

**SKILLS** 

• Artificial Intelligence

• Data Structures and

Algorithms

• OOPS Concept

PROJECTS

Library of various binary search trees  $\bigcirc \mid C++$ , STL, OOP, Data Structures & Algo

May 2020

- Project for the University's competition of projects 2020
- My teammates and I implemented Cartesian tree, Red-black tree, AVL tree, Splay tree, Skip-list.
- We tested their productivity and did the research.

Ray tracer | C++, STL, OOP, Data Structures

Oct. 2021

- Project of YSDA. Due to its rules, I'm not allowed to publish the code to open access, so contact me.
- Just a classical ray tracer. Supports different render modes and scene reading (.obj file parser).

Jpeg decoder | C++, STL, OOP, Data Structures

Mar. 2022

- Project of YSDA. Due to its rules, I'm not allowed to publish the code to open access, so contact me.
- Program decoding .jpg files.

Research of quantitative characteristics of reductions in lambda calculus 🔾

C++, STL, OOP, Data Structure

June 2022

- Thesis work.
- Implemented multi-functional interpreter of lambda-calculus.
- Did the experiments on all possible lambda-terms and did the research.

Engagement recognition service \(\mathbf{O}\) | DL, CV

June 2023

• Pet project for engagement recognition using Yolov5/v7.

#### TECHNICAL SKILLS

Main Programming Languages: C++, Python (Pytorch, Pandas, Numpy, Matplotlib, Opency).

**Developer Tools:** JetBrains Clion, JetBrains PyCharm, Jupyter Notebook.

**Technologies:** Linux (wsl), Git, Latex.

Languages: Russian Native, English Intermediate

#### **CERTIFICATIONS**

Specialization "The art of development in modern C++" | by MIPT and Yandex

Aug. 2021

• C++ Development Fundamentals: Red Belt

## **PUBLICATIONS**

## Analysis of normal forms in lambda calculus M

Jul. 2022

• How many lambda-terms have a normal form? How do terms change as a result of beta-reduction? Let's explore some characteristics!

# Comparison of different reduction (evaluation) strategies $\mathbf{M}$

Aug. 2022

• What reduction strategies do we know? What are the differences between different reduction strategies? Let's explore some characteristics and compare strategies to each other!

## **ACHIEVEMENTS**

2nd place in the University Olympiad programming contest among beginners	Nov. 2019
Participation in the University's competition of projects	May 2020
3d degree diploma in Southern and Volga Russia Regional Contest (NERC)	Nov. 2020
Participation in ICPC semi-final (Northern Eurasia finals)	Dec. 2020