# Yury Prokhorov

Curriculum Vitae



#### Education

2017-2021 Bachelor of Science (BS) in Applied Mathematics and Physics.

Department of Control and Applied Mathematics (DCAM) at Moscow Institute of Physics and Technology (MIPT). *Total GPA* -9.32 / 10.

2021-Present Master of Science (MS) in Applied Mathematics and Physics.

Phystech School of Applied Mathematics and Informatics at Moscow Institute of Physics and Technology (MIPT).

2019-Present Institute for Information Transmission Problems and Data Analysis (IITP)

2022-Present Yandex School of Data Analysis

# Work experience

2020–Present **Computer vision system developer**, NVI Solutions.

- development of computer vision algorithms: multicamera detection and tracking of multiple objects, calibration of cameras and other sensors, fusion of data from different sensors and other;
- backend development of a computer vision system with C++: project setup with CMake, unit testing with GTest, CV algorithms implementation;
- o data engineering: organization of structured storage of data, data markup;
- o infrastructure setup: Docker containerization, Gitlab CI.

## **Projects**

C++/Python Multicamera multiple object tracking by detection, Bachelor's thesis.

A system to track multiple similar looking people using cues from multiple cameras with overlapping fields of view is proposed. This work is part of my current research at «Vision systems» laboratory (lab. 11) at IITP. The research is supervised by Teplyakov L.M.

Python Remote controller for PTZ IP-cameras, O, networking class project.

The Telegram bot for controlling pan-tilt-zoom ip-cameras and automatically detecting vehicles and pedestrians has been created. The project was supervised by Podlesnykh D.A. (read more)

C++/Python **Sound track editor and classifier**, **O**, ICT class project.

A final course project for the ICT class. A C++ API for various WAV files transformations has been created. Also a neural algorithm for musical instrument recognition has been designed in Python. The project was supervised by Babichev S.L. (read more)

# Completed Courses

MATHEMATICS Linear Algebra, Probability Theory and Stochastic Processes, Mathematical and

Applied Statistics, Calculus (I, II, III, IV), Optimization Methods and Optimal Control Theory, Computational Mathematics, Functional Analysis, Differential Equations,

Abstract Algebra, Discrete Mathematics (Total GPA – 9.44 / 10)

COMPUTER Object Oriented Programming (C++), Hardware and Operating Systems (Linux),

ing, Cybersecurity (Total GPA – 9.86 / 10)

MACHINE Introduction to Data Analysis, Mathematical Foundations of Machine Learning,

LEARNING Applied Models of Machine Learning, and other (view certificates)

## Achievements

2017-Present Increased State Academic Scholarship for educational achievements

2022 Winner of Yandex «I am professional» olympiad in mathematics

2022 Participant of educational forum for mathematics and artificial intelligence

2022 Finalist of «Volga-IT» olympiad in programming in C++

# Languages

Russian (native), English (fluent, Advanced C1), German (Intermediate B1)

#### Interests

Watching and playing football, playing and studying chess, reading Russian classics, petting dogs and other animals