# Yury Prokhorov

Curriculum Vitae



#### Education

2017-Present BSc in Applied Mathematics and Physics, Moscow Institute of Physics and

Technology.

Currently a 3rd year student at the Department of Control and Applied Mathematics

(DCAM). Total GPA - 9.3 / 10

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

## Experience & Projects

C/C++ Unix shell emulator,  $\bigcirc$ , ICT class project.

A C++ program that runs in bash and emulates the main functional of unix shell.

C++/Python **Sound track editor and classifier**,  $\mathbf{Q}$ , final ICT class group 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 written an Puthon. The project was supervised by Pahichay S. L. (var.)

written on Python. The project was supervised by Babichev S.L. (read more)

Python **Neural algorithm for variational calculus problems**, **O**, optimization class project.

project.

A flexible algorithm based on neural networks is proposed for solving different calculus of variations problems. The project is supervised by Merkulov D. (read more)

#### Technical Skills

PROGRAMMING Python, C++, C, SQL, Javascript, PHP, HTML, Latex

LIBRARIES pytorch, tensorflow, keras, pillow, numpy, scipy, sklearn, matplotlib, etc.

UTILITIES git, ssh, bash, Jupyter Notebook, Google Colab

## **Completed Courses**

MATHEMATICS Optimization Methods, Computational Mathematics, Linear Algebra, Stochastic

Processes and Probability Theory, Calculus (I, II, III, IV), Functional Analysis, Differential Equations, Abstract Algebra, Discrete Mathematics ( $Total\ GPA - 9.45 / 10$ )

Computer Object Oriented Programming (C++), Operating Systems (Linux), SQL and

Science Databases, Algorithms and Data Structures (Total GPA - 9.8 / 10)

MACHINE Introduction to Data Analysis, Mathematics and Python, Supervised and Unsuper-

LEARNING vised Learning, Neural Networks and Python (view certificates)

# Scholarships & Awards

2017–Present Increased State Academic Scholarship for educational achievements

2018–Present Phystech Foundation Scholarship for top-ranked students

2018 Prize winner at the mathematics olympiad among MIPT students

# Languages

Russian (native), English (fluent, Advanced C1), German (basic)

### Interests

Watching and playing football, psychology, dogs and other animals