# NIKOLAEV MIKHAIL

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### **EDUCATION**

### Moscow Institute of Physics and Technology

2018-2024

Master's degree in Applied Math and Computer Science

Department of Innovation and High Technologies

Thesis: Information Theory in Deep Learning

MIPT is the best place in Russia to study CS according to THE World University Rankings

### Yandex School of Data Analysis

2020-2023

Degree in Machine learning Development of ML

### PROFESSIONAL EXPERIENCE

### SberAutoTech, Moscow

July 2022 - present

CV engineer and developer

- · Added semantic and instance segmentation in 2d pipeline. Creating a fusion between segmentation and other perception topics.
- · Created a 2d image balanced dataset.
- · Developed an algorithm for detecting objects and emissions in point cloud.
- · Added road lines detection in 2d and 3d.
- · Owner of several perception nodes.

### Visper.tech, Moscow

July 2021 - June 2022

CV engineer and developer

- · Improved conversation quality and realism of AI avatar. Added a lipsync for the English language.
- · Added features such as recoloring the Avatar's hair, adding facial expressions and gestures for the avatar.
- $\cdot$  Created and automated the character quality assessment process.

# DeepPavlov, Moscow

Februrary 2021 - May 2021

Researcher and developer

· Participated in the creation of Multiskill AI Assistant. Made a voice interface (based on Text-To-Speech). Made a supported knowledge bot database.

### Hybrid Intelligent Systems lab, Moscow

August 2020 - March 2021

Researcher and developer

· Got the results in recognition faceid, mouth tracking, gaze tracking and head pose.

### TECHNICAL SKILLS

Programming languages Technologies and Tools

Python, C++, Java, HTML, Bash Git, Unix, Docker, Dvc, S3, JIRA

Frameworks Databases

Flask, ROS, PyTorch, Tensorflow, opency, mmcv

PostgreSQL, Neo4j, Spark

### HONORS AND AWARDS

## HSE Olymliad of students in Game Theoty

Bronze medal

2020, Russia. More 5000 participants from 30 cities. This is one of the most prestigious Olympiads in game theory in Russia.

### Moscow Math Olimpiad

Silver medal

 $2018,\,\mathrm{Russia}.$  More than 5000 participants. This is one of the most prestigious Olympiad in math, held in Moscow

International Mathematical Society Tournament of Cities Winner's Diploma

2018, Russia. More than 100 cities of more than 25 countries. This is one of the most prestigious international Olympiad in math

# International Zhautykov Olympiad in Math

Bronze medal

2017, Kazakhstan. 137 participants from 14 countries. The IZhO is one of the most prestigious computer science competitions in the CIS region and Eastern Europe for secondary school students.

Kolmogorov International mathematical Tournament Bronze medal, 1st league 2017, Russia. More than 50 participants. This is the most prestigious team math tournament.

Member of the Moscow national team in mathematics (2016-2018)