# **Ivan Bondyrev**

C++, Python Developer

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## Education \_

## **Higher School of Economics**

Russia, Moscow

Bachelor of Applied Mathematics and Computer Science, GPA: 9.17

2020 - 2025

**Eindhoven University of Technology** 

The Netherlands, Eindhoven

Bachelor Computer Science

2023 - 2025

**Deep Learning School** 

Russia, Moscow

Student, 1st degree diploma

2019 - 2020

Deep Learning School is MIPT-based school where you can study neural networks and machine learning

## Technical Skills -

**Math** Linear algebra, Math analysis, Probability and Statistics, Discrete mathematics

Programming Algorithms and data structures, Modern C/C++, Python, Pytorch, Pandas, Sklearn, CatBoost, Numpy, Bash, x86 at&t assembly,

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Other CAOS, Git, Docker, A/B testing, LaTex, Spark, RabbitMQ, MySQL, PostgreSQL

# Experience \_\_\_\_\_

## Software engineer intern

Belgrade, Serbia

Yandex March 2023 - Jul 2023

I was an intern at Yandex. My team dealt with antifraud issues in Yandex services. My responsibilities were: to write code for distributed high-load systems, to cover services with metrics and to create convenient dashboards for monitoring texture effects and speed up antifraud services. Mostly C++, Python sometimes.

## Course Project, ClickHouse

The Netherlands

ClickHouse, TU/e

Jan 2024 - now

Right now I am working on my course project. I am currently implementing and deploying an intelligent auto-complete model for SQL queries in the ClickHouse database command line client, utilizing Markov Chains, recurrent neural networks, and transformers. This model enhances query formulation speed by suggesting the next possible words based on the user's query history and table information. It enables users to efficiently select suggested words, significantly improving the speed of query text formulation.

## Transformer and CNN pipelines

The Netherlands

HSE

As part of my Deep Learning course, I implemented several pipelines for training an Image Classifier and a Transformer. The Image Classifier was based on the ResNet architecture and trained and evaluated on the Tiny ImageNet Dataset. The Transformer was developed to translate text from German to English. Everything was done using Pytorch. The report on the transformer can be found here, the code here

Teacher's assistant Moscow

HSE University 2021 - 2023

I was a teaching assistant in the course of probability theory and statistics and computer architecture and operating systems.

#### Decentralised exchange trading system

## https://github.com/dexety/dex-trading-system

Moscow

Team project, HSE

2021-2022

My team and I made a bot that traded cryptocurrencies on different exchanges. We have done a lot of things:

- Creating a connector to connect to exchanges (binance, dydx)
- · Research different strategies for trading
- Opening websockets for data collection and processing
- · Data collection and analysis
- Implementation of different strategies
- Improving Strategies with Machine Learning

### Gene simulation in C++ using multithreaded programming

https://github.com/LeoProko/huy\_simulation

Team project, HSE 2021

Moscow

Moscow

My team and I tried to recreate the process of evolution. For this we have done: implemented an evolutionary process model in c++ using multithreading and concurrency, based on several experiments, the most important features for evolution were selected.

### Telegram bot using Docker & GitHub actions CI/CD

https://github.com/iyubondyrev/tg\_bot

Course Task, HSE 2021

This bot is task from a course to learn how to use docker, github actions, CI/CD. CI/CD is triggered for each new release, if all assertions are passed, then new version appears on the Amazon server.

#### Hello!

My name is Ivan. I was a third-year student of Applied Mathematics and Information Science at the best University in this field in Russia. Due to the Invasion of Ukraine, I decided to leave Russia and continue my studies in the Netherlands. I am studying at TU/e.

I have a lot of experience in Python/C++ and SWE in general. I have been working in the biggest Russian IT company (Yandex) for 5-6 months. They have many offices all over Europe, so I was in Serbia during my work. Also, I have experience in ML/DS, and math as I was studying at the University. I have implemented a lot of classical ML algorithms from scratch (such as Linear Regression, Decision Trees, Boosting, Kernel SVM and many others) and tuned them for specific tasks. In the university, we also focused on different DL approaches and got familiar with many well-known types of models (CNNs, RNNs, Transformers, LLMs, etc.). I was one of the best in my course and had excellent grades. If you are interested, take a glance at my CV; my work and study experience is covered in more detail.

I would love to put my skills and experience to good use in your team and become a valuable member of it! Thanks for considering my application!

Kind regards, Ivan.