

Andrei Panferov

ML ENGINEER

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Education

Moscow Institute of Physics and Technology (MIPT)

Moscow, Russia

BACHELOR OF SCIENCE IN PHYSICS AND MATH, GPA: 9.1/10.0

2020 - 2024

- Majoring in quantum physics and quantum computations

Yandex School of Data Analysis (YSDA)

Moscow, Russia

MACHINE LEARNING DEVELOPER

2021 - 2023

- General and specialized ML courses
- Collaborative research and open-source contributions

Experience

Yandex

Moscow, Russia

ML ENGINEER INTERN (NLP)

March 2022 - July 2022

- Refactored an **LLM inference framework** and added support for abstract *tabular data* insertion for efficient **Map-Reduce** inference
- Covered it with unit tests (**0 -> 85%** coverage)
- Took part in developing a *universal LLM benchmarking solution* and adapted 2 datasets for it

Terra Quantum AG

Moscow, Russia

SOFTWARE ENGINEER

July 2020 - July 2022

- Developed a framework for quantum circuit optimization (**python**)
- Analyzed experiment data and helped building models of quantum decoherence
- Benchmarked quantum algorithms for protein folding simulation

Projects

🔗 tensor_parallel

- A **python library** for tensor parallel **Hugging Face** models training and inference. Extensively using **transformers** and **torch distributed**.
- Created under the supervision of **Yandex Research** researchers

🔗 NLP bot

- Telegram **bot** with a fine-tuned **Language Model**
- Automatic **data collection** and preparation
- Easily deployed with **Docker compose**
- Full deployment with **Telegram API**, **backend** and **metrics**

🔗 Raytracer

- An almost **pure C++ raytracing** program
- Features CATCH2 **unit tests** and **GitHub-CI**

🔗 The cooler Raytracer

- The same raytracer but in **Rust**

🔗 Neuromatch Academy Final Project

ML DESIGN

Summer 2021

- Calcium imaging **neuron activity** analysis
- **Convolutional network** for **time series** analysis

Awards

International Physics Olympiad

Israel

GOLD MEDAL

Summer 2019