Malinovskii Vladimir

MI RESEARCHER · SOFTWARE ENGINEER

Work Experience _____

Yandex Research

ML RESIDENT Feb. 2024

· Working on quantization algorithms for LLMs

Yandex (Infrastructure)

SOFTWARE ENGINEER

Jun. 2022 - Feb. 2024

- · Was responsible for one of the key parts in an internal kubernetes-like system
- · Participated in hiring process by conducting coding interviews

Yandex (YTsaurus)

SOFTWARE ENGINEER INTERN

Dec. 2021 - Jun. 2022

- Wrote highload C++ code for tracking memory consumption during data delivery
- Since YTsaurus is opensource, my work is available here (link)

Terra Quantum

PART TIME ML ENGINEER Aug. 2020 - Jun. 2022

• Developed a GPT-based pipeline for a dialog bot

Education

HSE(Higher School of Economics)

MASTER OF SCIENCE IN APPLIED MATHEMATICS AND COMPUTER SCIENCE

Jun. 2023

- Joint master's program with the Yandex School of Data Analysis
- Holding perfect 5/5 GPA

MIPT(Moscow Institute of Physics and Technology)

BACHELOR OF SCIENCE IN APPLIED MATHEMATICS AND PHYSICS

Sep. 2019 - Jun. 2023

- Minor in data analysis
- Achieved 4.68/5 weighted GPA

Publications_____

PV-Tuning: Beyond Straight-Through Estimation for Extreme LLM Compression

NIPS, 2024

Vladimir Malinovskii*, Denis Mazur*, Ivan Ilin*, Denis Kuznedelev, Konstantin Burlachenko, Kai Yi, Dan Alistarh, and Peter Richtarik **Oral**

Awards

2019 **Gold medal,** International Physics Olympiad

Israel

Pet projects _____

Llama3.1-8b Inference in browser (AQLM.rs)

Oct. 2024

- I implemented multithreaded CPU inference for quantized Llama 3.1-8b model.
- Demo is available here (link).

Telegram bot for downloading audio

Jul. 2022 - Jul. 2024

- 200k users overall
- 9k daily active users

Technologies

For industrial purposes I prefer to write code in Go. For data science projects I use Python. When I need to develop something close to the hardware, I opt for C++ or Rust.