

Andrei Kazachkov

Curriculum Vitae



WORK EXPERIENCE

CURRENT, FROM SEPT 2022 (PT)

Additional course C from Dedinsky Ilya Rudolfovich
Scielang

In this project, I studied the structure of programming languages, eventually writing my own language. You can read more about the project on my GitHub page.

JIT

The training model JIT-compiler, which translates the byte code generated by my programming language into a set of machine commands appropriate to my computer's architecture, which are then executed.

Hashtable

In this project I was introduced to the hash table, and I also worked on optimizing the bottlenecks of the search function with the perf profiler program.

Mandelbrot

With the help of the SFML graphics library, a Mandelbrot set was drawn, which we then optimized using SIMD instructions.

Printf

This is my implementation of the standard library function printf in x86x64 assembler.

Differentiator

A program that differentiates the entered equation and automatically generates a report in LaTeX, which reflects the main stages of calculations.

JAN 2023 (PT)

A question of choice in physics

I investigated the process of collision of a rubber ball with a solid horizontal surface in a gravitational field. The result was a model describing the deformation of the body during the impact. My work was one of the best among the freshmen. A project presentation is attached to my Github, as well as information confirming the result.

EDUCATION

2022 – 2026

Bachelor of Applied Maths and Physics
MIPT DREC

GPA: 7.5/10.0

GPA (Computer science): 9.0/10.0

ACHIEVEMENTS

2022 "**Kurchatov**" olympiad
Diploma of the second degree

2022 "**Lomonosov**" olympiad
Diploma of the third degree

COMPUTER SKILLS

LANGUAGES C, x86-64 Assembly

TOOLS Makefile, VSCode, perf, LaTeX, git

SKILLS

Volunteering

He helped to prepare the venues for the performances of invited guests at the days of Phystech.

Organization

Participated in the organization of a holiday at his faculty. I heard only positive feedback about my work from the participants.

Public relations

I easily communicate with people, thanks to which I have formed a fairly wide circle of communication. I like to get to know people, help them and be useful.

Sport

I go to the gym, I like to play volleyball. I try to keep myself in good shape, as it helps to maintain high performance.