

# Andrey DERZHAVIN

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#### EDUCATION

PHYSICS AND MATH LYCEUM 30 **MOSCOW INSTITUTE OF PHYSICS AND TECHONLOGY**  2017 - 2019 / Saint Petersburg, Russia 2019 - 2023 / Dolgoprudny, Russia

B.S IN APPLIED MATH AND PHYSICS

### **EXTRA EDUCATION**

"INDUSTRIAL PROGRAMMING. PART 1. C LANGUAGE."

Sep - Dec 2019

MIPT course. Lecturer – I. Dedinsky, Mail.Ru.

"USES AND APPLICATIONS OF C++ LANGUAGE"

Sep 2020 - Apr 2021

MIPT course. Lecturer - K. Vladimirov, Intel.

"SIMULATION TOOLS OF CP AND OS AND LEARNING PROGRAMS' BEHAVIOUR"

Sep - Dec 2020

MIPT course. Lecturer - I. Petushkov, Huawei.

### **EXPERIENCE**

ACRONIS INTERNSHIP

Jul 2020 - Nov 2020 / Remote

Arcticle "Usage of right-context grammars in static analysis of source code on C++", participation in two conferences

**HUAWEI RRI (BASE CHAIR)** 

Jul 2021 - Present / Moscow, Russia

· Arcticle "Improving loop termination prediction with ISA instruction hinting the number of iteration", participation in MIPT conference

### PROJECTS \_

**BINARY TRANSLATOR** 

May 2020

EDUCATIONAL PROJECT FROM 1ST COURSE AT MIPT

Program which translates my own processor's binary code into x86 binary code and creates an .exe file

**PARACL** 

Mar 2021 - Jul 2021

EDUCATIONAL PROJECT FROM 2<sup>ND</sup> COURSE

• My own language interpreter with an option to generate a LLVM IR

## **OPTIMISATION OF MATRIX MULTIPLICATION**

Apr 2021

EDUCATIONAL PROJECT FROM 2<sup>ND</sup> COURSE

· Comparison of several optimisation methods, such as transposing, loop unrolling, temporary variables, OpenCL

**TRIANGLES** Feb 2022 - Present

**EDUCATIONAL PROJECT** 

Program to check intersection of large amount of triangles

**LEECHVM** Dec 2022

EDUCATIONAL PROJECT FROM 4<sup>TH</sup> COURSE

• Lite virtual machine which executes python-like bytecode

### **SKILLS**

**PROGRAMMING LANGUAGES** C | C++ Codegen, Scripting: Python

SOFTWARE DEVELOPMENT git | make | CMake | Linux (WSL2, Ubuntu) | LATEX

FRAMEWORKS & LIBRARIES LLVM | OpenCL | Numpy

LANGUAGES C2: Russian B2: English

### EXTRA.

- Interested in computer technologies, system programming
- Resolute, hardworking, non-contentious
- · Hobbies football, history