Andrey DERZHAVIN

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 github | telegram

EDUCATION

PHYSICS AND MATH LYCEUM 30
2017 – 2019 / Saint Petersburg, Russia

MOSCOW INSTITUTE OF PHYSICS AND TECHONLOGY
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

• Learn right-context grammars, propose & investigate several ways of applying them to static analysis of C++ source code

• 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

• Implement tool which finds loops in program's CFG using Boost Graph

• Conduct research on dynamic cycles classification, estimate potential performance improve from enhancing loop termination prediction using ISA hint

• 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 2ND COURSE

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

OPTIMISATION OF MATRIX MULTIPLICATION
Apr 2021

EDUCATIONAL PROJECT FROM 2ND 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

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 ***C1(IELTS):*** English

EXTRA

• Interested in compilers, system programming

• Resolute, hardworking, non-contentious

• Hobbies – football, history