



DOLGOV ALEXANDER

1st year student, 18 years old

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Dolgoprudny, Russia

KetchuppOfficial

STRENGTHS

Responsible Pedantic
Stress-resistant Inquisitive
Communication skills
Quick learner

SKILLS

Programming languages:

C x86-64 assembly

Tools:

make git valgrind

gdb kcache/grind

Other skills:

LaTeX Markdown

LANGUAGES

Lang 1: Russian (native)

Lang 2: English (B2/C1)

EDUCATION

Moscow Institute of Physics and Technology | DREC

2021 – 2025

Dolgoprudny, Russia

- GPA: 8.0/10 (examination session is in progress)
- GPA in Informatics: 8.0/10.

BEST PROJECTS

Processor |

November 2021 - now

- 3-part project
- Part 1: Small assembler that supports proprietary instructions and generates executable binary file
- Part 2: Virtual processor executes programs written on proprietary assembly
- Part 3: Disassembler generates .txt file with assembly code after analyzing binary file

ParaPF: para print function |

March 2022

- Small assembly implementation of standard C function printf
- Supports %b format specifier for binary output

Hash table |

April - May 2022

- Quality of 7 hash functions was examined
- Hash table search was boosted by x86-64 assembly and Intel Intrinsics

Binary translator |

May 2022

- Translates binary code generated by my assembler (a part of "Processor" project) into x86-64 machine code
- Machine code executes just after compilation without making ELF as in JIT compilers

Other projects can be seen on my GitHub page

SPHERE OF INTEREST

- Toolchain, formal languages
- Processor architecture
- Object-oriented programming in C++