Roman **Glaz**

MIPT DREC STUDENT

☎ +7-925-449-27-48 | ✉ vokerlee@gmail.com | ♨ March 25th, 2003 | ⌂ github.com/Vokerlee | ⌨ Vokerlee

Education

MIPT (Moscow Institute of Physics and Technology)   *Dolgoprudny, Russia*
UNDERGRADUATE   *since Sep. 2020*

- Second-year undergraduate student of DREC (Department of Radio Engineering and Cybernetics)
- Average point 9.4/10

Skills

Languages	C, C++, x86-64 Assembly, RISC-V Assembly, Latex, Bash
Tools	Cmake, Make, Linux API and Shell, Git, Profiling and testing tools
Knowledge	Microarchitecture (BPU, ILP, out-of-order execution, TLP, SMT), compilers' implementation technics, basic LLVM skills, understanding how Linux OS is organized, basic FPGA and STM32 programming skills
Foreign languages	English (B2)
Mathematical base	Mathematical analysis, Linear algebra, Differential equations, Theory of probability

Key projects

1 course

- Own VASM assembler language and compiler, which generates executable files that can be executed by VASM CPU
- Toy CMM programming language, which supports front-end, middle-end, back-end (compilation to own assembler language VASM), translation to x86-64 .EXE executable file, generating LLVM IR
- Hash-table, Mandelbrot rendering and Alpha-Blending algrorithm optimizations by SIMD instructions and assembler inserts (x86-64 arch)
- Some other toy programs and x86-64 assembler programs

2 course

- Interpreter of RISC-V .elf executable programs
- Backuper daemon (with Inotify Linux kernel subsystem)
- Own SSH implementation (in developing)
- Some other system programs based on Linux API like shared stack

Completed courses

Compiler technologies and professional programming   *ISP RAS x Huawei*
TEACHER – ILYA DEDINSKY   *1 semester, 2020/2021*

Introduction to Computer Architecture and Assembly Languages   *ISP RAS x Huawei*
TEACHER – ILYA DEDINSKY   *2 semester, 2020/2021*

Industrial C++ programming   *Technotrack Mail.ru*
TEACHER – ILYA DEDINSKY   *2 semester, 2020/2021*

Introduction to STM32 programming   *DMTT DREC MIPT*
TEACHER – ARSENIY POIDA   *2 semester, 2020/2021*

FPGA programming   *DMTT DREC MIPT*
TEACHER – EVGENY SHARAMED   *2 semester, 2020/2021*

Architecture of computing systems   *ILab*
TEACHER – KIRILL KOROLEV   *3-4 semesters, 2021/2022*

CPU and OS simulation tools (ongoing)   *Huawei*
TEACHER – IGOR PETUSHKOV   *3-4 semesters, 2021/2022*

Computer technologies (ongoing)   *MIPT*
TEACHER – ANDREY ZHADCHENKO   *3-4 semesters, 2021/2022*