Kirill Lakhnov

Email
GitHub
Telegram

EDUCATION

MIPT DREC, Bachelor of Applied Mathematics & Physics.
Moscow, Russia
GPA: 7.82

PROJECTS

C-like language: In this project I implemented semantic and lexical analysis of my own programming language using the recursive descent algorithm. I also made a language translator for a simplified assembler, which is processed in a virtual processor I wrote earlier. In my language you can use conditional operators, loops, variables, functions. Furthermore, I used graphwiz for debug and compiling a tree. Furthermore, I used graphviz for debug and compiling a tree.

Mandelbrot Set: In this project I researched SIMD optimizations for construction the Maldenbrot's set. The results of my research you can see on my GitHub.

Alpha-blending: Alpha-blending is the task of superimposing one picture on another. Here I continued researching SFML and SSE instructions. The results of my research you can see on my GitHub.

Printf: In this project I implemented a simplified analog of the "printf" function on NASM, which supports specifiers such as: %%, %b, %d, %c, %o, %s, %x.

COMPUTER SKILLS

Languages: C/C++, x86-64 Assembly, LaTeX, Python.
Tools: Make, CMake, VSCode, git, graphwiz, SFML, QT.
Foreign language: English(B1).

INTERESTS

compilers, low-level optimization, operation systems, computer architecture, mathematics.

ACHIEVEMENTS

Completed Huawei's course "C-Programming" in MIPT
Passed 6 out of 8 tasks from Huawei's Assembly and Architecture course
All-Russian Olympiad for Schoolchildren in Economics — Two-time awardee of regional stage
All-Russian Olympiad for Schoolchildren in Economics — Participant of the final stage
All-Russian Olympiad for Schoolchildren in Mathematics — One-time awardee of regional stage