MENTIY ARTEMIY

2nd year student at MIPT

ferter101@yandex.ru   7-937-180-13-15   Dolgoprudniy, Russia   t.me/Teppy381   Teppy381

PROJECTS

Triangles with Vulkan visualization

https://github.com/Teppy381/Triangles

`C++` `Vulkan`

One part of the project is responsible for finding intersections between triangles, and the other for rendering them on the screen. Intersecting triangles are colored red, the rest are blue. There is simple lighting model and movable camera.

Matrix

https://github.com/Teppy381/Matrix

`C++`

In this project I created matrix class following the Rule of 5, and trying to make it exception safe. The program calculates determinant of a given matrix.

LFU cache

https://github.com/Teppy381/LFU-cache

`C++`

This project demonstrates the LFU caching algorithm. It takes in the size of cache and a sequence of page calls, represented by numbers. Output is the amount of cache-hits. This project also features the "perfect" cache algorithm, meaning it makes decisions based on future calls.

CPU Emulator

https://github.com/Teppy381/Processor

`C`

Project was made to explore how CPU works. Can translate a reduced ASM code to binary and then execute it on the CPU emulator. Project consists of a simple ASM to binary compiler, DISASM (back to ASM) and a CPU implementation.

LRU-K cache

https://github.com/Teppy381/LRU-2-cache

`C`

This project demonstrates the LRU-K caching algorithm. It takes in the size of cache, the K and a sequence of numbers, representing page calls. Output is the amount of cache-hits.

SUMMARY

I am 2nd year student at MIPT. Have written several tasks in C, now focusing on C++. Have experience in low-level programming and reverse engineering, as well as object-oriented programming. I am curious about how all things work and always try to learn from people around me.

LANGUAGES

`C` `C++`

OTHER

`x86 Assembly` `Git` `Cmake`

EDUCATION

B.Sc. in Applied Mathematics and Physics
MIPT
Sept 2022 – June 2026

ADDITIONAL COURSES

Uses and applications of C++
by K.I.Vladimirov
Sept 2023 – Jun 2024

Industrial Programming in C
by I.R.Dedinsky
Sept 2022 – Jun 2023

Algorithms and Data Structures
VK Education
Sept 2023 – Nov 2023