ERMOLAEVA VARVARA DMITRIEVNA

ermolaeva.vd.mipt@gmail.com | https://github.com/tsatsulya | 8 963 500 11 44

C/C++ developer

EDUCATION

Moscow Institute of Physics and Technologies, second year bachelor student

LANGUAGES:	C, C++, Python
SOFTWARE/TOOLS:	Cmake, Make, Git, Linux, lldb, VS code, vim, doxygen
LIBRARIES:	OpenAL, SFML, Graphviz
ADDITIONAL SKILLS:	English(B1), Russian(native), effective web searching, music encoding/decoding
KNOWLEDGE:	Basic algorithms, data structures

PROJECT EXAMPLES:

SIMPLE CPU (C) - Simple processor model. Accepts pseudo assembler code, tokenizes the input code, and executes the list of entered commands (or returns a specific error). New instructions are developed and implemented into pseudo assembler syntax using code generation. https://github.com/tsatsulya/Proc

STACK WITH DATA SECURE (C) - Stack data is protected with set canaries and hash, standard stack operations are supported in secure variant. https://github.com/tsatsulya/Stack_ver1

OPTIMIZED LINKED LIST (C)- A list with the possibility of optimizing access to elements, a modified storage structure in memory. Standard list functions and functions for list optimization are supported. https://github.com/tsatsulya/Linked_list

MIRITH (C++) - A large project with three developers to create a music application for convenient structuring and tagging of tracks stored in the user's device memory and transfer downloaded tracks between devices using the account system. Includes an algorithm for determining the correlation between two music tracks, a server-client system, its own player, a system for organizing and storing / hashing files, developing a GUI and working with decoding and metadata of music files in various formats (mp3, flac, monkey, ogg, wav).
https://github.com/alexpaniman/spotivar

SPHERE OF INTERESTS: Optimization algorithms, compilers and formal language theory, backend development, DevOps