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PROJECTS

Bitonic Sort on GPU

Mov 2022 - Dec 2022

9 github

A vectorized and super multi-threaded number sorter based on the bitonic sorting algorithm. Outperforms (-O3) CPU by 7 times

Completed Course in Algorithms on C++

May 2022 - May 2022

Q github

Conditions and solutions to problems from the course, as well as many tests for them

Binary Translator

May 2020 - May 2020

♀ github

Project (5K lines) translate the text format assembler to binary format in a wide range of x86 architecture instructions

Succinct on-disk algorithm (Graduate work)

math April 2023 - May 2023

♀ github

Two data structures are explored, implemented and compared: String B-Tree and String B-Tree + Geometric Burrows-Wheeler Transform. Their difference is that the second is implemented on the basis of the first, but at the same time takes up less space due to compressed indexes. The results were obtained that the compressed structure takes up 4 times less space on the disk compared to a regular one, but works twice as long.

Archiver on GPU

Mart 2020 - Mart 2020

Q github

Archives very quickly on the GPU

Calc integral in VLAN

May 2022 - May 2022

Q github

The most interesting of the projects is the calculation of a definite integral on many computers in parallel. Tested in a local network on 8 computers with 8 threads

LuQulc

Mov 2019 - Jan 2020

Q github

• A quantum programming language that immediately executes

Robo arm on STM32

Mart 2021 - May 2021

♀ github

Stepper motor drivers and robot arm control code

Simple Graphic lib on DX11

Mov 2020 - Jan 2021

9 github

• A simple 2D graphic lib on 3D direct library

Printf on clear ASM

Mart 2020 - Mart 2020

♀ github

Pure assembler printf that recognizes insertion of string %s, binary format %b, octal: %o and hex %x

PROFESSIONAL SKILLS

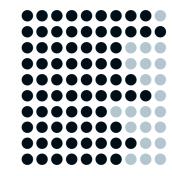
C++17 C **ASM**

Git

Bash

Algorithms LockFree Algo Multithreading

Linux **OpenCL**



STRENGTHS

Development

C++17 C17 OpenCL **ASM** Bash Python3 Java

· Libraries and Frameworks

googletest OpenCL-CLHPP **PyTorch** DirectX11 MPI LL (for STM32)

Development Tools – IDE

VS Code CLion Neo Vim **Qt Creator Visual Studio**

WORK EXPERIENCE

Farvater, Middle C++ developer [™] June 2022 - Sep 2023 **9** Moscow Huawei, Junior C++ developer

EDUCATION

MIPT

LANGUAGES

Russian **English**



SOFTSKILLS

Responsibility

Team Work

Sociability

Professionalism

Learning Potential

Organization

Flexibility