Aliya Minimullina

Moscow, Russia   Age: 20

+7-965-595-06-55   minimullina.ae@phystech.edu   @maturur

Education

Radio Engineering and Computer Science
MIPT
2022 - 2026
GPA: 8.37/10
GPA(CS): 8.83/10

Profile

github.com/Aliyaminim

Technical Skills

Programming languages:
C++, C, RISC-V assembly
Other:
Git, bash, CMake, make, valgrind, simple Python scripts, gdb, LaTeX

Languages

Russian Native
English B2+

Academic achievements

- participant in the final stage of the All-Russian Olympiad in Physics (9-10 grade)
- 4-time winner of the regional stage of the All-Russian Olympiad in Physics (7-10 grade)
- 2-degree diploma of Moscow Olympiad in Physics (11 grade)

Additional activities

Attended conferences:

- OS DevConf 2023
- OS DevConf 2024
- C++Russia 2025
- Sysconf 2025

(gave a lightning talk about Git Internals)

Work experience

Intern Developer in Language Runtimes, Syntacore

October 2024 - Present

- contributing to JS Virtual Machine
- analyzing and fixing usage of RVC instructions inside V8 codegen

Intern Developer in Test Generators and Verification Infrastructure, Syntacore

July 2024 - September 2024

- contributed to llvm-snippy

Learning experience

C/asm language course — Sep. 2022 - May 2023
K.Vladimirov

Uses and Applications of C++ — Sep. 2023 - Apr. 2024
K.Vladimirov
Middle exam grade: 9/10

RISC-V and Test generators — Feb. 2024 - Apr. 2024

RISC-V toolchain — Feb. 2024 - Apr. 2024

Compiler Summer school — Jul. 2024
K.Vladimirov

Computer Networking Course — Sep. 2024 - Dec. 2024
M.Klimanov

Projects C++

ParaCl language interpreter

- implemented Flex and Bison in Frontend
- collaborated in a team

Red Black Tree

- developed a type of augmented binary search tree class with custom lookup
- member functions are of O(log n) complexity

Triangle3D

- leveraged linear algebra algorithms to optimize the efficiency of the intersecting triangle calculation process

Matrix

- utilized a two-level container to store and manipulate matrix data efficiently
- implemented Bareiss and Gauss algrorithms to calculate determinant

RRIP caching algorithm

- studied an article on the RRIP caching algorithm to understand its principles and implementation details
- developed an ideal replacement policy for comparing the performance
- utilized recency-friendly and thrashing access pattern tests

RV32I model

- implemented the RV32I ISA