



☎ 8 (991) 771 60 19
✉ ovakimian.al@phystech.edu
✉ blekrfiro@gmail.com
✉ @id_n_id
🔗 d3clane

Education

Moscow State School 57

Physics class, graduated with gold medal

2019–2023

Moscow Institute of Physics and Technology

Bachelor degree (finished first year)

Phystech School of Applied Mathematics and Informatics

2023–PRESENT

Grades

Overall

GPA: 9.09/10 (only excellent marks)

Programming courses

GPA: 9.40/10

System programming and compiler technologies course (Dedinskiy)

First semester: 9/10
Second semester: 10/10

Ovakimyan Arman

Languages

- Russian (Native)
- English (B2)

Projects

DEC 2023 – MAY 2024

Tools: C/C++, ASM X86-64, Graphviz

X86-64 Compiler for my own programming language

GH link: <https://github.com/d3clane/Compiler>

Developed my own esoteric programming language with compiler that generates executable x86-64 elf64 file.

Divided into three programs:

1. Frontend
2. Middle-end
3. Backend

APR 2024

Tools: C/C++, ASM X86-64, KCachegrind, Python, Graphviz

Optimizing hash table using asm

GH link: <https://github.com/d3clane/HashTable>

Using asm to improve time performance of search requests in hash table. Three types of optimizations are used:

1. SIMD instructions
2. Inline asm
3. Linking with another file with asm code

NOV 2023

Tools: C/C++, Graphviz, SDL

Akinator

GH link: <https://github.com/d3clane/Akinator>

Wise tree that can guess characters based on their traits. Can memorize new characters.

MAR 2024

Tools: C/C++, ASM X86-64, SFML

Mandelbrot

GH link: <https://github.com/d3clane/Mandelbrot>

Optimizing the speed of Mandelbrot set generation using SIMD instructions.

Skills

- C/C++
- Assembly x86-64
- Git
- Graphviz
- KCachegrind
- Latex
- Make
- EDB
- Python
- SDL
- SFML
- Algorithms and data structures
- Gnuplot

Achievements

Russian National Physics Olympiad

Twice final stage silver medal

2022, 2023

Candidate to the national physics team for the international Olympiad

2023

International Experimental Physics Olympiad (IEPHO)

Bronze medal

2020

Russian National Informatics Olympiad

Twice region stage prize winner

2021, 2023

NOV 2023

Tools: C/C++, LATEX, Gnuplot

Differentiator

GH link: <https://github.com/d3clane/Differentiator>

Reading math expressions in human-readable common form, differentiating it. After that generating pseudo-scientific pdf with step-by-step differentiating, graphs building. Also decomposes the expression into Maclaurin series.

FEB 2024

Tools: C/C++, Disasm, SDL

Hacking my friend's program (crackme)

GH link: <https://github.com/d3clane/DosHack>

Finding vulnerabilities in my friend's program and exploiting them.

FEB 2024 - MAY 2024

Tools: C/C++, Python

Laboratory works from algorithm course

GH link: <https://github.com/d3clane/labs>

Laboratory works to study different data structures and algorithms:

1. Comparing different stack implementations
 2. Comparing different sorting algorithms
 3. Comparing different algorithms of building binary heap
 4. Comparing different hash tables and hashing algorithms
 5. Comparing different binary search tree implementations
-

Soft Skills

- Quick learning
- Organized
- Hard-working
- Sociable and collaborative
- Responsible