

# Vladimir Vekhov

+7 904 635 07 76 | [vekhov.vv@phystech.edu](mailto:vekhov.vv@phystech.edu) | Telegram: [@vladimir\\_v\\_spb](https://t.me/vladimir_v_spb) | GitHub: [github.com/Vladimir1t](https://github.com/Vladimir1t)

## EDUCATION

---

### Moscow Institute of Physics and Technology (MIPT)

*Bachelor's Degree in Applied Mathematics and Physics*

GPA: 7.4 / 10

Moscow, Russia

2023 – 2027

### Core Courses:

*Mathematical Analysis, Linear Algebra, Computer Science, Physics*

## EXPERIENCE

---

### ISP RAS

*Compiler technology department. Wrote sigbox algorithm of auto signature generation*

Learned internet protocols.

July – August 2024

### Tarantool VK

*Write pagination support for rtree index in kernel.*

November 2024 – April 2025

## PROJECTS

---

### My Football Programming Language | C, Recursive Descent Parser, CPU Simulator

- Created a programming language using recursive descent parsing.
- Built a compiler supporting tokenization, abstract syntax tree creation, and assembly.

### ParaCL | C++, Flex, Bison

- Para C language - simple language of programming with own compiler.

### Differentiator | C, Binary Tree, Graphviz

- Developed a tool for differentiating and simplifying mathematical expressions.
- Implemented a graphical tree representation using Graphviz.

### Intersection of triangles | C++, BVH tree, Cmake, CI

- This program detects intersections between triangles in 3D space.
- Implemented a BVH tree for optimisation.

### My Processor, RVI32 Processor | C, C++, ISA

- Created a processor and assembler supporting stack, RAM, and registers.
- 2 types: stack-based CPU with my own instructions and RVI32 simulator CPU

### Data Compression | C, LZW

- Implemented LZW algorithm for lossless compression and decompression with dictionary support.

### Client-server application | Python, Wireshark

- Simple client-server application with tcp and udp transport protocols.

## ABOUT ME

---

- Know C, C++, python, Internet protocols, Linux, Risc-V, OOP
- Interested in system programming, backend development, and cybersecurity. Aspiring to learn ML.
- Passed C, C++, RISC-V and Compiler courses.
- Programming Mentor of the I. Dedinsky C course.
- Participated in Physics Olympiads, became a prize-winner in Rosatom, Kurchatov, Spb olympiad events. Love science.
- Strong teamwork and brainstorming skills developed through group projects.
- Hobbies: football, running, reading, guitar.