

Baidusenov Timur

Born: September 20, 2005

Currently: Dolgoprudny, Russia

✉ baidusenov.tb@phystech.edu

Telegram: @bai_tim

Scientific interests

- C++, C
- Compiler technologies
- RISC-V

Education

MIPT DREC

Dolgoprudny, Russia

Second-year student, Applied

Mathematics and Physics

GPA: 8.9 / 10.0

Learning Experience

2023-2024 System programming & compiler technology course

Huawei, Ilya Dedinsky's course

2024-2025 Basic course of programming in C++

Yadro, Konstantin Vladimirov's course

Technical Skills

Programming Languages: C++, C, Python

Development Tools: Git, Linux, GDB, Assembly, \LaTeX
Cmake, Conan, Docker, Github Actions

Technologies & Libraries: Google Test, OpenGL, OpenCL, Flex, Bison

Hardware & CAD: SolidWorks, EasyEDA, ESP32

Languages

Russian - Native Proficiency

English - B2

Projects

- **ParaCL** - Custom interpreted language with C/Python syntax.
Frontend: Flex/Bison, AST generation, interpreter runtime.
- **TrianglesGL** - OpenGL-based 3D visualization of triangle intersection algorithms. GPU-accelerated rendering with real-time transformations.
- **MatrixChain** - Optimized matrix chain multiplication using dynamic programming. Includes a custom memory-efficient matrix class.
- **AVLTree** - Self-balancing AVL tree implementation for segment queries. Supports insertion, deletion, and logarithmic time range queries.

All projects implement CMake-based builds with Conan packaging deployed to a custom repository ([ConanPackages](#)). Some internal packages from this registry for component integration.