



Aleksei Alekseev

Third grade MIPT student

CONTACTS

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COURSES

C/C++ PROGRAMMING

LINUX KERNEL, OPERATING SYSTEMS

ELECTRICAL CIRCUITS, SIGNALS

RESEARCH PHYSICS LAB WORKS

CALCULUS, DIFFERENTIAL EQUATIONS

LINEAR ALGEBRA

DISCRETE ANALYSIS, GRAPH THEORY

ACADEMIC ENGLISH B2/C1

HARD SKILLS

- Strong Analytical Skills
- C/C++/Python
- Git
- CMake, Make
- Linux shell
- Data structures
- Algorithms
- Concurrency, asynchronous programming

ABOUT ME:

- Initiative and hard working student.
- Keen on solving challenging problems.
- Responsible and result focused.
- Communicative and stress tolerant.
- Curious about studying and becoming a professional one day.

EMPLOYMENT HISTORY:

Huawei Russian Research Institute (01.07.23 - Current Time)

Our team is working on investigation and implementation of new approaches in dynamic workloads scheduling on heterogeneous ARM architectures to plummet power consumption and increase devices' performance.

PROJECTS:

✓ TCP CHAT

Link: <https://github.com/alexxRT/Odnokursniki>

It is small network tcp chat. It has private dialog windows and offline/online statuses. For client/server interaction **libuv** was used. It provides asynchronous and networking facilities. For simple **GUI** I implemented small library **ncurses**.

✓ LIST

Link: <https://github.com/alexxRT/List>

Easy to use, self-written data structure with all essential **find()**, **insert()**, **delete()** functions. It's smartly resizable and cache friendly.

⚙️ SOFT CPU

Link: <https://github.com/alexxRT/CPU>

It consists of two parts: assembler and CPU. Assembler reads commands from input file and translate them into binary representation. Assembler is based on **file read**, **tokenization** and **recursive decent** and can report syntax errors on assembling. CPU simply executes binary code.

✓ STACK

Link: <https://github.com/alexxRT/Stack>

The simplest self-written data structure. Protect instruments were implemented, such as **hashing**, **canaries** and **validation**.

✓ COOLING DROPLET RESEARCH

Link: <https://github.com/alexxRT/PhysicsProjects>

I investigated dependency between droplet's temperature and its falling height. As a result, I delivered my presentation to a group of physicists in scientific English language.