



Pavel Kirin

C++ DEVELOPER

Ready to relocate

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Summary

I am a C++ developer, and I'm open to job offers with a relocation.

I'm passionate about software programming and building efficient solutions and architecture. I'm interested in algorithms and optimization methods.

My advantages are craving for fundamental knowledge; effective project management and problem-solving; flexibility and adaptability for new problems; and easy communication for teamwork.

Experience

TrueConf

Moscow, Russia / Remote

C++ BACKEND DEVELOPER

Apr. 2022 - Present

- Worked on the "TrueConf Server" and "TrueConf Enterprise" products.
- Developed, maintained, and improved inner chat features, including chat's database.
- Implemented unit and integration tests using the GoogleTest framework.
- Developed and maintained Python scripts for the server's stress testing.
- Notable technologies used: [C++17], [Boost], [Boost.ASIO], [SQLite], [PostgreSQL], [GoogleTest], [Python], [FASTBuild].

SoftBuilding

Saint Petersburg, Russia

C++ DEVELOPER

Sep. 2021 - Jan. 2022

- Developed and maintained software for internal use within the company.
- Finalized the legacy C++ parsers with libcurl library.
- Developed the advanced Web Scraper written on TS, working on a headless version of Chrome browser.
- Notable technologies used: [C++20], [Node.JS], [TS], [.NET], [MS SQL].

Skills

Programming	[C/C++20], [OOP], [Boost], [Multithreaded programming], [POSIX API], [SQL]
Familiar with	[Python]
Software & Tools	[Git], [Jupyter Notebook], [Jira Software], [OpenProject], [Wireshark], [Postman]
Soft Skills	Communication, Adaptability, Team Work, Problem-solving, Flexibility, Project management
Languages	Russian (native), English (B2)

Publications

Deletion in Red-Black tree

[Link: Habr/Deletion in RB-tree](#)

UNDERSTANDING HOW DOES THE DELETION IN RED-BLACK TREE WORKS.

Data structures, Algorithms

Education

École 42 / School 21

[Link: 42/Alumni certificate](#)

ALUMNI

Aug. 2020 - Jun. 2023

- Programmer courses with peer-to-peer system between students. There I learned much about the culture of programming, and trained on complex projects.
- Improved skills: [C/C++], [STL], [Object-oriented programming], [POSIX API], [Multithreaded programming], [IPC], [Algorithms and optimizations], [Linux], [Git], [Documentation]

Moscow Aviation institute

Moscow, Russia

BACHELOR'S DEGREE

Sep. 2019 - Jan. 2022

Selected projects

For more info about the next projects, please visit the GitHub pages by the links below.

webserver

OWN IMPLEMENTATION OF WEBSERVER (LIKE NGINX) WITH CUSTOM CONFIGS

- Solving multiplexing problem with low-level select function.
- HTTP/1.1 requests processing.
- Custom configurations of multiple servers.

Link: [MosheGroot/webserver21](#)

C++98, Sockets, Multiplexing, OOP

ft_containers

REWRITING OF FOUR STL CONTAINERS + RED-BLACK TREE

- Own implementations of vector, stack, map, and set.
- Own implementation of Red-Black tree for map and set containers

Link: [MosheGroot/ft_containers](#)

C++98, STL, SFINAE, Data structures

minishell

OWN IMPLEMENTATION OF THE SHELL WITH SYNTAX ANALYSIS, PARSING, AND IPC

- Readline library for interactive I/O.
- Syntax analyzer for input values.
- Supporting pipes, redirections, and heredoc

Link: [LinearBasis/minishell](#)

C, POSIX API, IPC

miniRT

MINI RAY-TRACING PROJECT

- Custom scene file format.
- Supported: sphere, plane, square, triangle, and cylinder.
- See **screenshots** on the project page!

Link: [MosheGroot/miniRT](#)

C, Linear algebra, Multithreading

Hobbies

- Guitar
- Photography
- Painting
- Writing