Pavel **Kirin**

C++ Backend Developer

Remote / Ready to relocate

✉ pavel.kirin.mgroot@gmail.com | ✈ MosheGroot | MosheGroot | MosheGroot | MosheGroot

Summary

I am a C++ developer, and open for remote job offers or with a relocation.

I'm passionate about software programming, building efficient solutions and architectures. I'm interested in algorithms, methods of optimization, mathematics, and also in Data Science.

My personal advantages: craving for fundamental knowledge, effective project management and problem-solving, flexibility and adaptability for new problems, easy communication for team work.

Experience

TrueConf
C++ Backend Developer

Moscow, Russia / Remote
Apr. 2022 - Present

- Develop and maintain TrueConf Server product.
- Improve and maintain various chat features.
- Solving optimization tasks for performance improvements.
- Notable technologies used: [C++17], [Boost], [Boost.ASIO], [SQLite], [PostgreSQL], [FASTBuild], [GoogleTest].

SoftBuilding
C++ Developer

Saint Petersburg, Russia
Sep. 2021 - Jan. 2022

- Develop and maintain software for internal use within the company.
- Finalize the pure C++ parsers with libcurl library.
- Develop the advanced Web Scraper written on TS, working on 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 (basics)]
Familiar with	[Python], [TS], [.NET]
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
Understanding how does the deletion in Red-Black tree works.

Link: Habr/Deletion in RB-tree
Data structures, Algorithms

Selected projects

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

webserver
Own implementation of webserver (like nginx) with custom configs

Link: MosheGroot/webserver21
C++98, Sockets, Multiplexing, OOP

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

ft_containers
Rewriting of four STL containers + Red-Black tree

Link: MosheGroot/ft_containers
C++98, STL, SFINAE, Data structures

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

minishell

OWN IMPLEMENTATION OF SHELL WITH SYNTAX ANAYLYSIS, PARSING, AND IPC

C, POSIX API, IPC

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

miniRT

MINI RAY-TRACING PROJECT

C, Linear algebra, Multithreading

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

Education

École 42 / School 21

Paris, France / Moscow, Russia

STUDENT

Aug. 2020 - Present

- Programmer courses with peer-to-peer system between students. There I learned much about the culture of programming, 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

Hobbies

- Guitar
- Photography
- Painting
- Writing