



Pavel Kirin

C++ DEVELOPER

Moscow, Russia · Remote / Ready to relocate

+7 916 648-86-62 | pavel.kirin.pp189@gmail.com | [PP189B](#) | [PP189](#) | [pp189](#)

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++ DEVELOPER

Moscow, Russia

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], [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].

Freelance

WORKING FREELANCE AND AS A PROGRAMMING TUTOR

Moscow, Russia

Nov. 2020 - Sep. 2021

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: PP189B/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

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

*Link: [PP189B/ft_containers](#)
C++98, STL, SFINAE, Data structures*

minishell

OWN IMPLEMENTATION OF 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 at the project page!

*Link: [PP189B/miniRT](#)
C, Linear algebra, Multithreading*

Education

École 42 / School 21

STUDENT

Paris, France / Moscow, Russia

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

BACHELOR'S DEGREE

Moscow, Russia

Sep. 2019 - Jan. 2022

Hobbies

- Guitar
- Photography
- Painting
- Writing