

Pavel Kirin (Moshe Groot)

C++/Rust Software Engineer

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SUMMARY

A dedicated software engineer with strong experience in **C++** and growing expertise in **Rust**, I am currently working on projects focusing on **high-performance backend** systems and **messenger** applications.

I have a keen interest in **distributed systems**, and I emphasize both **optimization** and **maintainability** in my work.

My approach involves producing **well-documented, readable** code while considering **multiple** solutions to ensure **the most effective** results. I thrive in **collaborative** environments, where my **flexibility** and **problem-solving** skills contribute to team **success**.

Ongoing Projects:

- **Another One Messenger (AnOn):** Developing a Jabber client with terminal UI and encryption features.
 [MosheGroot/Another-One-Messenger](#)
- **Perfect Assist Flow:** A scalable live online support system with text, voice, and video capabilities.
 [MosheGroot/Perfect-Flow-Assist](#)

EXPERIENCE

ANOTHER ONE MESSENGER

Oct 2024 – Current

| OWNER & RUST SOFTWARE ENGINEER

- Developing a Rust **Jabber** client & server with terminal UI, encryption and Mesh network features.
- 'Another One Messenger' is **literally** another messenger.
But potentially **the last one**.

TRUECONF

April 2022 – Current | Moscow, Russia & Remote since October 2022

| C++ SOFTWARE ENGINEER

- Enhanced chat functionality and refined the codebase of 'TrueConf Server' and 'TrueConf Enterprise' products.
- Implemented a caching mechanism that **increased** server throughput by **50%**.
- Developed automated integration and unit tests using **GoogleTest** to ensure product stability.
- Created Python automation scripts for **stress testing** and verifying server optimizations.

Technologies: C++17, Boost.ASIO, GoogleTest, Python, SQLite, PostgreSQL.

SOFTBUILDING

September 2021 – January 2022 | Saint Petersburg, Russia

| SOFTWARE ENGINEER

- Developed and maintained internal company software.
- Finalized C++ parsers using libcurl and built a web scraper using Node.js and TypeScript.

Technologies: C++20, Node.js, TypeScript, .NET, MS SQL.

SKILLS

PROGRAMMING

Proficient:

C++ • C
SQL • PostgreSQL • SQLite

Experienced:

Python • Rust • fbuild • shell

LIBRARIES/Frameworks

Boost.ASIO • GoogleTest

TOOLS/PLATFORMS

Git • Windows • Linux

EDUCATION

ÉCOLE 42 / SCHOOL 21 ||

ALUMNI, LVL. 13

August 2020 - June 2023

Moscow, Russia & Remote

MOSCOW AVIATION INSTITUTE

FUNDAMENTAL COMPUTER SCIENCE
AND ENGINEERING

September 2019 - Jan 2022 | Moscow,
Russia

PUBLICATIONS

DELETION IN RED-BLACK TREE [RU]

An article at the biggest russian
programming forum: [\[Habr Link\]](#)

There is more! Scroll!

PROJECTS

ANOTHER ONE MESSENGER | RUST

2024 - Present



[MosheGroot/Another-One-Messenger](#)

AnOn Messenger: Developing a secure Jabber client in Rust with terminal UI, using P2P encryption.

WEBSERVER | C++

Ecole 42, 2022



[MosheGroot/webserver21](#)

Created an HTTP web server with multiplexing capabilities in **C++98**.

FT_CONTAINERS | C++

Ecole 42, 2022



[MosheGroot/ft_containers](#)

Rewrote STL containers and implemented a **Red-Black tree**.

MINIRT | C++

Ecole 42, 2022



[MosheGroot/miniRT](#)

A mini **ray-tracing** project supporting geometric objects like spheres and planes.