

IVAN KIRILIN

C/C++ Backend Engineer

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SUMMARY

C/C++ backend engineer with a strong Linux and database background. I improve performance and reliability, automate builds and tests (Jenkins/GitLab), and use Python to speed up routine work. I've worked near PostgreSQL/Greenplum internals and multithreading, so I'm comfortable with low-level issues. My goal is simple: fewer incidents, faster releases, and clear metrics.



SKILLS

Languages: C, C++ 17/20, Python, SQL, Bash

Systems/Build: Linux, Docker/Podman, CMake, Make, Git, GitHub/GitLab/Jenkins CI, GCC/Clang

DB/Storage: PostgreSQL/Greenplum/Cloudberry (internals, extensions: diskquota/PostGIS/pgAudit), S3-compatible

Testing: SQL regression suites, GoogleTest, Pytest

Perf/Debug: perf, strace, gprof, clang-tidy, cppcheck, Google Benchmark, multithreading

EXPERIENCE

SBERBANK (DISTRIBUTED LARGE DB SYSTEMS)

Moscow, Russia

C/C++ Developer

Apr 2025 - Oct 2025

- Migrated Database backup/ingest to LZ4: smaller size with faster speed, runtime reduced by 7% with 20 TB run
- Increased test coverage (unit + regression) and automated checks in Jenkins
- Updated Greenplum resource groups to fit the customer's rules and added tests; known bugs dropped by 40%
- Resolved critical PostGIS/pgAudit defects (crashes & edge cases) under strict deadlines. Delivered a hotfix that reduced incident volume by 30%
- Ported the diskquota (a DB extension) to Cloudberry for 50+ node clusters; this let us release a client info product 4 weeks before the deadline

IVA TECHNOLOGIES (VIDEO/REAL-TIME SYSTEMS)

Moscow, Russia

C++ Developer

Jan 2024 - Apr 2025

- Implemented real-time features with WebRTC and resolved complex multithreading issues that improved call-session stability
- Added pytest tests and release checks, so we catch bugs earlier and releases became more stable
- Built an end-to-end auto-build for our internal Linux fork and hooked it into GitLab CI/CD, speeding up mobile app releases
- Built the company's first reusable timer widget from scratch in a large codebase; fixed memory leaks and refactored code deeply
- Ported corporate repository to the latest Linux kernel release and delivered a reproducible automated release building; clean build now completes in ~30 minutes (down from ~2 hours), and new-dev onboarding now takes 1 hour

EDUCATION

UNIVERSITY OF BONN

Master of Science in Computer Science

Germany, Bonn

Oct 2025 - Present

MOSCOW AVIATION INSTITUTE

Bachelor of Computer Science, Major in Computer Science; Minor in Mathematics

GPA 2.0 (German scale)

Moscow, Russia

Sep 2021 - Aug 2025

ADDITIONAL INFORMATION

- Languages: Fluent in Russian (native), English (C1 CEFR), German (B1)