IVAN KIRILIN
C/C++ Backend Engineer

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github.com/Bonartze • +49 175 993 7345 • Family status: single • date of birth: 12.02.2004 • nationality: Russian

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) during a limited amount of time; developed in a short time a time-critical client fix that reduced incident volume by 30% post-patch.
- 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 — Germany, Bonn
Master of Science in Computer Science — Oct 2025 - Present

MOSCOW AVIATION INSTITUTE — Moscow, Russia
Bachelor of Computer Science, Major in Computer Science; Minor in Mathematics — Sep 2021 - Aug 2025
GPA 2.0 (German scale)

LUDINOVO MSOU SCHOOL №1 — Ludinovo, Russia
GPA 1.75 (German scale) — Sep 2011 - Jul 2021

ADDITIONAL INFORMATION

- Languages: Fluent in Russian (native), English (C1 CEFR), German (A1, currently learning)
- Student residence permit, eligible to work up to 20 hours/week during studies; visa sponsorship required for full-time roles.