

# IVAN KIRILIN

## C/C++ Backend Engineer

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[github.com/Bonartze](https://github.com/Bonartze) • +49 175 993 7345 • date of birth: 12.02.2004 • nationality: Russian

### SUMMARY

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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

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**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

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#### 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

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#### 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

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- Languages: Fluent in Russian (native), English (C1 CEFR), German (A1, currently learning)