

Giulio Calacoci

Principal Software Engineer · Tech Lead · PostgreSQL, Platform Engineering, AI Agent Infrastructure

Florence, Italy · Open to remote (EU) · asdmaster@gmail.com
linkedin.com/in/gcalacoci · github.com/gcalacoci · gcalacoci.github.io

SUMMARY

Principal engineer with 20 years of software engineering, 15 of them in the PostgreSQL ecosystem. At 2ndQuadrant: PostgreSQL consultant and support on-call, Barman developer from 2013, and builder of the continuous delivery platform for every product. At EDB: Foundation, the multi-tenant CI/CD framework that builds and ships every EDB product; Barman tech lead with a team of up to six; the PostgreSQL optimization project in the control plane of EDB's managed Postgres service; and, in the AI team, the layer between AI agents and the database (MCP, OAuth 2.0, session tracing, least-privilege access). Looking for a tech lead, staff or principal role in a team that designs and builds together.

EXPERIENCE

EDB (EnterpriseDB) · Principal Software Engineer

Sep 2020 – Aug 2026 · Florence, Italy (remote) · title formerly Principal DevOps Architect

Joined through EDB's acquisition of 2ndQuadrant.

AI team (Mar 2026 – Aug 2026)

- Recruited into the AI team on the strength of `pg-airman-mcp`, which started from proofs of concept with the VP of the unit; part of the group that reviewed architecture decisions with VPs and SVPs.
- Co-designed the MCP connections of EDB AIDB; part of the team behind AIDB 7.7, which added an MCP endpoint and in-database agents to Postgres for EDB's enterprise customers.
- Designed session tracing and purpose logging, an audit trail linking each query to the agent session and its declared purpose; worked on agent governance with Postgres roles, grants and row-level security. Built Python components for EDB's internal Langflow fork.

Barman tech lead (2023 – Mar 2026)

- Led the technical direction of `Barman`, the open-source backup and recovery manager for PostgreSQL (3,200+ GitHub stars), in Python: WAL archiving and streaming, base backups and point-in-time recovery, with backups to local disk or cloud storage (S3, Azure Blob, Google Cloud Storage). Team of up to six engineers; design docs (RFCs) and PR reviews; shipped about 23 releases (3.4 to 3.18), making the go/no-go call with the director.
- Built reliability into the product: integration with PostgreSQL failover, tested on Kubernetes clusters that simulate failovers and switchovers; incremental and resumable backups; designed and led immutable (WORM) backup storage support.
- Second-level (expert) support engineer for backup and recovery on customer installations, several with databases above 10 TB; post-mortems were routine.
- From 2024, ran the PostgreSQL optimization project in the control plane of EDB's internal multi-tenant managed Postgres service (DBaaS) on Kubernetes, deployed through Helm and Terraform; led and mentored a junior developer.
- Designed EDB's technical interview for engineering hires. Hired three engineers into the Barman team and mentored them; they now write most of Barman's code.

Software delivery: Foundation (2020 – 2023)

- Created **Foundation**, EDB's GitHub-based framework to build, test, sign and publish every EDB product: 7 OS families and 4 CPU architectures, on GitHub Actions, AWS and Cloudsmith. Took it from zero to adoption by every product team; release preparation went from days to about a day.
- One of the owners of Foundation's AWS account; managed its infrastructure as code with Terraform and Helm, including the AWS Lambda functions that checked and distributed packages. Release controls: review and signing before publishing, penetration-tested.
- Technical lead of the team that merged EDB's and 2ndQuadrant's delivery infrastructures, working with the SVP on infrastructure decisions; initially two direct reports.

2ndQuadrant · Continuous Delivery Manager

Sep 2016 – Sep 2020 · Prato, Italy

- Designed, built and ran the company's continuous delivery platform: a Jenkins framework that standardised builds for every product on every supported Linux distribution, with automated package signing and publishing. Release time went from days to hours.

2ndQuadrant · Python Developer and PostgreSQL Consultant

Aug 2011 – Sep 2020 · Prato, Italy

- Barman developer from 2013, for a time the project's only developer and its top contributor.
- PostgreSQL support engineer (L1 and L2) on the on-call rotation, weekend shifts included: ran customer calls during outages or joined them as the expert.
- Disaster recovery and high availability consultant: crisis support, consultancy, training, and high-performance database design.

Earlier

- **Devise.IT s.r.l.**, Software Analyst (2009–2011): web applications in Java, PHP and JavaScript. **grafica-web**, Chief Web Application Developer (2008–2009): led a small team.

OPEN SOURCE AND TALKS

- **Barman**: developer since 2013, tech lead 2023–2026, 226 commits.
- **pg-airman-mcp**: MCP server that gives AI agents governed access to PostgreSQL. Led EDB's fork to 1.0 (77 of 90 commits since the fork): OAuth 2.0, read-only mode, session tracing, hardened containers, five releases. Featured in a [Red Hat Developer series](#) on OpenShift AI, co-authored by EDB's Torsten Steinbach.
- Talks at PGConf.EU 2025, DataOps Barcelona 2019 and EuroPython 2017 ([full list](#)).

SKILLS

- **PostgreSQL**: high availability, replication, failover, backup and point-in-time recovery, disaster recovery, performance tuning, roles, grants and RLS
- **Platform**: Kubernetes (hands-on; working towards the CKA), Terraform, Helm, GitHub Actions, Jenkins, CI/CD and release automation, Docker, Linux; AWS (EC2, S3, IAM, VPC, ECR, RDS, Lambda, CloudWatch, App Runner; wide hands-on use); monitoring with Nagios, Zabbix, Grafana, some Prometheus
- **AI**: MCP, agent access control and observability, Langflow; daily agentic work with Claude Code (skills, memory, subagents)
- **Languages**: Python (senior), SQL, Go (working knowledge, not yet strong), Rust (basics)
- **Ways of working**: design docs and reviews, open-source maintainership, hiring and mentoring, remote and asynchronous teams

EDUCATION AND LANGUAGES

- Computer Science, Università degli Studi di Firenze, 2002–2008 · left to work as a developer
- **Italian** (native) · **English** (full professional proficiency)