



Gabriele Brosulo
V. Carlo Alberto Dalla Chiesa 5
12080 Pianfei (CN)

tel 3402745528
email gabriele@brosulo.net
www <http://brosulo.net>
github github.com/g4b0
stack stackoverflow.com/u/1961727

Profile

I am Gabriele Brosulo and I have been writing software for twenty-five years. I am currently a Senior Backend Developer at TicketSms, an online ticketing platform: I design the backend solutions, coordinate the work of three senior developers and keep the alignment with the other team leads, with the product owner and with the CTO, to whom I report. I held the team leader role at Foreach, from 2019 to 2022.

I work on PHP 8 backends with Laravel, which I have used since version 4 in 2013, and I am equally at home in the legacy applications we are migrating to a microservices architecture. I design the backend solutions and write them up as technical documents before anyone opens an editor: the team implements against a design, not an intuition.

In the past I was a fullstack developer, and I have also written firmware in C and Android apps in Java. I have worked in systems administration and DevOps, and have run small teams dealing directly with the client. I work mainly on UNIX-like operating systems, but I also know the Apple and Microsoft worlds.

I try to apply the KISS philosophy everywhere and I like getting to the bottom of things by reading the documentation. In recent years I have brought prompt engineering and AI agent-assisted development into my workflow, with one firm rule: drive the model, do not be driven by it. It is the ground where I experiment the most: I enjoy exploring new patterns for working with agents — how the context is structured, what gets delegated and where the checks go — and bringing into the team the ones that hold up in practice.

Outside work I am a main developer on chessview.org, an open source project (AGPL) by Raphael Babilonia: I look after the Node.js/Express backend on MongoDB — tests, coverage and continuous integration — building it with an agent-first workflow. It is the testing ground for the patterns I then bring into the team: github.com/raphaelbabilonia/chessview.org-backend

I speak and write English fluently, French rather less so.

Professional experience

2022 - present

TicketSms
www.ticketsms.it

Remote

Senior Backend Developer

- Since 2023 I have coordinated the work of three senior developers, reporting directly to the CTO: task assignment and review, technical interviews, onboarding of new hires, constant code reviews and pair programming as the way the team grows.
- Design of the backend solutions and writing of the technical documents the team works from: the design is written and discussed before development starts.
- Interface between the backend, the other team leads (app, frontend, DevOps), the product owner — who attends the team's dailies — and the CTO: development direction is decided together, and the backend proposes and estimates roadmap items.
- Tickets sold by the platform went from 329K in 2021 to 3.6 million a year from 2023 (I joined in February 2022), with peaks handled without service degradation: a 15,000-ticket sell-out in under 20 minutes (Green Day, Milan).
- Modularisation of the platform to open it to foreign markets: support for multiple national tax regimes, today Italian, Croatian and Maltese.
- On-call and production incident management, always on the front line.
- Organisation of CI/CD work with the Agile Scrum methodology.
- AI agent-assisted development in daily work: prompting conventions, boundaries of what is delegated, and systematic review of generated code, shared with the team.
- Design and automated maintenance of the project's LLM wiki: a knowledge base covering the whole platform, which the agents keep up to date themselves and use as context. It is above all the tool we use to tackle the legacy — reconstructing the behaviour of undocumented code and guiding its migration to microservices — but it serves current development just as well. Fewer tokens per task, shorter development times.
- Bugfixing and development of new features on a high-traffic backend in a cloud architecture (AWS) with autoscaling, and migration of the legacy products into the new microservices architecture.
- Performance optimisation through flow analysis on Datadog and targeted work on the bottlenecks, mostly traceable to recursive loops or to the MySQL RDBMS. Handling of process concurrency issues.
- Implementation of the pub/sub protocol with a RabbitMQ broker for asynchronous jobs, and of the Observer pattern for event-driven handling of state changes in the FSMs that represent the project's entities.
- Participation in internal security audits aimed at finding and fixing possible flaws in the system.
- Languages: PHP, JavaScript, SQL, Bash
- Data storage: MySQL, S3, Redis, DynamoDB, MongoDB
- Frameworks: Laravel, legacy in-house framework
- Tools: Git, Composer, Docker, RabbitMQ, Datadog, Claude Code

2019 – 2022

Foreach
www.foreach.it

Busca (CN)

Senior developer / Team leader

Team leader

- Management of a team of three developers for the integration, maintenance and refactoring of a legacy CRM for the acquisition, routing and distribution of leads in real time. Integration with a wide range of web services, from a daily CSV to RESTful APIs, through SOAP, JSON and other formats. Strategic architectural choices were required by the significant growth in data volume, from a database of about 200K records to over 18 million.
Most senior technical profile in the team: mentoring of the junior developers, code reviews and definition of the development standards. Direct contact with the client on requirements and with the administration on quotes and invoicing.
- Design and development of an online quotation portal with the Vue.js framework and PHP API endpoints: <https://directmarketplace.it>. Runtime computation optimised with the CQRS pattern.
- Languages: PHP, JavaScript, SQL, Bash
- Frameworks: legacy in-house framework, Vue.js
- Tools: Git, Composer, Docker

Systems design and development

- Design and installation of a multi-datacenter cluster to absorb e-commerce load peaks and the failure of a single datacenter. Distributed filesystem (GlusterFS) and database replicated in real time (MariaDB and Galera). A third datacenter acting as arbiter to solve the split-brain problem. Data flow split across separate machines per datacenter: reverse proxy – application server – DB server.
- Design and installation of a centralised development server with multiple PHP and MySQL versions, and automated scripts to provision new users and development environments.
- Introduction of TDD and of Git as the versioning system across the company, both for the development workflow and for deployment.
- Migration of a pool of high-traffic servers to AWS infrastructure, with the introduction of continuous integration and delivery (CI/CD) pipelines.
- OS: Linux (Debian, Ubuntu Server, CentOS, openSUSE)
- SW: PHP, Apache, MariaDB/MySQL, Memcached, GlusterFS, Galera, Postfix, Iptables, Docker
- Cloud: VMware, AWS
- CI/CD: CodeCommit, CodeBuild, CodeDeploy, CodePipeline

2012 - 2019

Zirak
www.zirak.it

Mondovì (CN)

Developer / Project Manager

- Design and development of the ERP for Proteo s.c.s., a waste management company: staff management, scheduling of collection rounds, real-time tracking of vehicles on online maps, integration with the payroll system. With the MyProteo cross-platform mobile app (Cordova) and a RESTful API server.
- Design and implementation of the communication server between vehicle and Android app for an autonomous vehicle, in a self-driving car R&D project for Magneti Marelli: direct contact with the client and coordination of the internal resources on the other components.
- Frontend integrations and bugfixing on Vodafone SmartSales, a Cordova application (Android, iOS and browser) used by Vodafone's entire Italian sales network: analysis of the client's technical requirements and coordination of the mobile development group.
- Refactoring of the database and application logic of the whole Ferodoracing catalogue, affecting the e-cat, the B2B, the PDFs and the web management system.
- HTML5 application usable offline (application cache, local storage, IndexedDB) to manage SilvaGroup's chemical formulas, with a Laravel backend and API.
- Contributions to the core of the open source CMS Silverstripe from 3.0 onwards — patches and deep hacking published on GitHub, born out of the projects where we ran it in production. Update of the GestPay payment module to Banca Sella's new cryptographic specifications.
- Heavily customised institutional and e-commerce sites, multilingual and integrated with existing management systems, with RESTful API development: comune.mondovi.cn.it, tribedistribution.com, edilclima.it, ferodoracing.com, cacciolatto.com.
- Languages: PHP, JavaScript, SQL, HTML5, CSS3
- Frameworks: Laravel, Silverstripe, CodeIgniter, Vue.js, Framework7, jQuery
- Technologies: SVN, AJAX, JSON, JWT, SSL, Cordova, Composer, Docker, Vagrant

2005 - 2012

Edisoft
www.edisoft.net

Saluzzo (CN)

Developer / Systems administrator

- Design and development of a SOAP web service for exchanging XML documents between banks and land-registry search agents: requesting, viewing and cancelling land registry searches nationwide.
- Web management system for the company's internal organisation (technicians' call-outs, remote assistance, clients and invoicing, liveupdate) and institutional websites built with the CMSs of the time, including comune.saluzzo.cn.it and the restricted area of bancacrs.it.
- Firmware in C: coin changer driven by a PIC18 speaking CCTalk to bill validator, hopper,

keypad and LCD; a prize game with photocells, coin acceptors and ticket dispensers; port of FreeRTOS to the ARM AT91SAM7S-EK evaluation board.

- Multigame written entirely in C on Linux, 42 games on a 42-inch plasma screen: hardware selection, audio and video with the SDL libraries, handling of joystick, electronic coin acceptor and cooling, anti-cloning protection with a hardware key. Changes to the open source MAME project to integrate it with the interface.
- Systems administration: virtual server farm with a KVM hypervisor and guests on separate VLANs, mail (Postfix), web (Apache, PHP, MySQL), FTP and DNS (Bind) servers, firewalling policies (Shorewall), monitoring (Nagios), WiFi hotspot with captive portal and RADIUS authentication. Management of the company network across three LANs, a DMZ, several VPNs to clients and suppliers and two remote server farms. Moved the company from Maintainer to Registrar for .it domains.
- Android app for two-way data synchronisation between a SQL Server database and the device's SQLite.
- Languages: PHP, JavaScript, SQL, C, shell scripting
- CMSs and frameworks: Drupal, Joomla, WordPress, PrestaShop, CakePHP
- Technologies: SOAP, XML, SSL, AJAX, CCTalk, FreeRTOS, SDL
- Systems: Linux, KVM, Apache, MySQL, Postfix, Bind, Shorewall, Nagios

Q4 2004

Isiline S.p.A.
www.isiline.it

Saluzzo (CN)

Internship

- Development of an e-commerce site for managing and topping up prepaid phone cards on a distributed J2EE architecture (Tomcat, JBoss, PostgreSQL): JSP on the server side, Enterprise Java Beans in Java with RMI, JNDI and JDBC.

H1 2004

Giletta S.p.A. www.giletta.com

Revello (CN)

Mechanical CAD draughtsman

- 2D mechanical drawing (AutoCAD 2004, Mechanical Desktop) and design with 3D modelling (Inventor 8).

2001-2004

DeltaTre Informatica
www.deltatre.com

Turin

Freelance consultant

- Data input and television graphics for live sports events, as spotter and graphic operator: UEFA Champions League 2001/02 and 2002/03 (Munich, Trondheim, Lens, La Coruña, Madrid), IAAF Grand Prix Final 2002, FIFA World Cup 2002 (Daejeon and Daegu, Korea), Commonwealth Games 2002 (Manchester), FIFA Confederations Cup 2003 (Paris), UEFA Euro 2004 (Lisbon and Porto), IAAF World Junior Championships 2004 (Grosseto).

Education

2000

Istituto Tecnico Don Bosco —
technical high school, surveying

Lombriasco (TO)

Surveyor's diploma (Geometra), 96/100

2006

University of Turin, Faculty of Computer
Science

Turin

Degree in Computer Science - Systems and Networks

Final mark: 102/110. Core exams: Operating Systems, Algorithms, Networks and Lab, Security, Systems and Network Management, Databases and Lab, Software Engineering.

Interests

I am interested in computing, open source and artificial intelligence. I practise mountaineering, surfing, climbing and yoga. I love cooking and playing with my son.

*I authorise the processing of my personal data under
Regulation (EU) 2016/679 (GDPR) and Italian Legislative
Decree 196/2003, for your recruitment purposes.*