Marcio Bagnus

Software Engineer — Industrial Software · CAD/CAM · Manufacturing

C#/.NET · Java/Spring Boot · TypeScript · Systems Integration

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Professional Profile

Information Systems Engineer with more than 8 years of professional experience in software development, backend engineering, systems integration, and the delivery of technology solutions across public-sector organizations, technology companies, and industrial environments in Argentina and Italy.

Experienced in enterprise applications, microservices, REST APIs, databases, and software architecture, with hands-on knowledge of C#/.NET, Java/Spring Boot, TypeScript, SQL Server, and PostgreSQL. Specific experience in CAD/CAM software, nesting algorithms, and software solutions related to manufacturing processes.

Professional background includes Iveco, Mercado Libre, and Libellula Software, combining software development, technical problem-solving, requirements analysis, and collaboration with multidisciplinary teams and international clients.

Particularly interested in opportunities involving Industrial Software, Manufacturing Technology, CAD/CAM, Systems Integration, industrial process digitalization, and Smart Manufacturing. Currently pursuing a Bachelor's Degree in Artificial Intelligence at UTN, with an interest in Computer Vision and AI applications for industrial environments.

Italian citizen and EU citizen, with previous professional experience in Italy and availability for opportunities in Argentina and Europe.

Professional Experience

Software Engineer — Freelance Córdoba, Argentina

Máquinas Bagnus *02/2024 – 08/2026*

- Led the end-to-end development of a digital solution for managing customers, machines, and repair orders, from process analysis and requirements definition through implementation and delivery.
- Translated operational business processes into software workflows for customer identification, equipment intake, repair tracking, status management, and customer self-service.
- Designed and implemented the solution using Next.js, React, TypeScript, PostgreSQL, and Prisma.
- Worked directly with business users to identify operational needs and translate them into software features and business rules.

Backend Software Engineer — CAD/CAM Cherasco, Italy

Libellula Software *07/2023 – 12/2023*

- Contributed to the development and maintenance of CAD/CAM software solutions used in industrial and manufacturing environments.
- Refactored backend modules and nesting algorithms to improve performance, reliability, and execution accuracy.
- Worked with international customers to understand requirements, analyze operational issues, and implement software solutions tailored to their needs.
- Investigated complex production issues, analyzing system behavior and implementing software fixes.
- Collaborated with multidisciplinary teams to translate manufacturing requirements into reliable technical solutions.

Ssr. Backend Software Engineer Córdoba, Argentina

Mercado Libre *09/2021 – 01/2023*

- Developed and maintained microservices using Java and Spring Boot in a large-scale production environment.
- Worked on backend services and REST APIs, focusing on reliability, performance, scalability, and maintainability.
- Participated in technical discussions related to service design, software architecture, deployments, and production reliability.
- Improved system observability and incident diagnostics using Datadog and New Relic.
- Collaborated with engineering teams through code reviews, technical discussions, and knowledge sharing.

Software Engineer — .NET Córdoba, Argentina

Municipality of Córdoba *08/2016 – 03/2021*

- Developed and modernized software solutions to digitalize administrative and operational processes, working with internal departments and external technology providers.

- Developed and maintained backend and full-stack solutions using C#, .NET, JavaScript, NHibernate, and SQL Server.
- Refactored legacy components and improved software architecture, maintainability, and application reliability.
- Implemented CI/CD pipelines using Azure DevOps and automated database migration processes.
- Acted as a technical point of contact between internal teams and external vendors to analyze requirements, integrate solutions, and resolve technical issues.

Engineering Intern — ICT Córdoba, Argentina
IVECO *08/2012 – 01/2014*

- Developed internal web applications to automate regulatory information processing and improve operational processes within an automotive manufacturing environment.
- Designed and optimized SQL Server stored procedures for data processing, reporting, and operational information extraction.
- Gained experience working with information systems and technology requirements within a large industrial manufacturing organization.

Education

National Technological University (UTN) — Córdoba Regional Faculty Córdoba, Argentina
Information Systems Engineering *2009 – 2026*

National Technological University (UTN) — Córdoba Regional Faculty Córdoba, Argentina
Bachelor's Degree in Artificial Intelligence — In Progress *Sep. 2026 – Present*

Technical Skills

Backend: C# · .NET · Java · Spring Boot · REST APIs · Microservices
Industrial Software: CAD/CAM · Nesting Algorithms · Manufacturing Software · Process Digitalization
Architecture and Integration: Software Architecture · Systems Integration · Domain-Driven Design · Clean Architecture · Legacy System Modernization
Databases: PostgreSQL · SQL Server · MySQL · Prisma · Database Migrations
DevOps and Observability: Azure DevOps · CI/CD · Git · Datadog · New Relic
Frontend and Additional Technologies: TypeScript · JavaScript · React · Next.js · Go · Python
Methodologies and Collaboration: Agile · Scrum · Kanban · Requirements Analysis · Cross-functional Collaboration

Areas of Interest

Industrial Software Development · Manufacturing Technology · CAD/CAM · Industrial Digitalization · Smart Manufacturing · Industry 4.0 · Industrial Automation · Industrial AI · Computer Vision

Languages and International Mobility

Spanish: Native
Italian: Conversational
English: A2+
Citizenship: Italian — European Union Citizen
Geographic Availability: Argentina · Italy · Spain · Europe