

ALESSANDRO ZANNI

Full Stack Software Engineer | AI & Conversational Systems Specialist

Barcelona, Spain • azanni098@gmail.com • +39 333 743 4909

[linkedin.com/in/alessandro-zanni-320262147](https://www.linkedin.com/in/alessandro-zanni-320262147)



PROFILE

Full Stack Software Engineer with 6+ years of experience across web development and AI-powered systems. Currently at Heres, specializing in Generative AI and LLM integrations — designing conversational AI architectures, managing multi-channel chatbot platforms, and building scalable backend systems. Expert in React, Node.js, TypeScript, and cloud infrastructure (AWS, PostgreSQL). Comfortable moving between deep system design and cross-functional collaboration with product and non-technical stakeholders.

EXPERIENCE

Software Engineer — Generative AI & LLM Integration — Heres s.r.l.

08/2021 – Present

Bologna, Italy

Leading AI-driven platform specializing in custom AI agents, conversational AI systems, and business automation.

- **Generative AI & LLM Development** — designed and implemented integrations with large language models and AI frameworks, enhancing chatbot intelligence and conversational capabilities
- **Conversational AI Architecture** — architected and maintained scalable chatbot management systems handling real-time conversations across multiple channels (Telegram, WhatsApp, Facebook Messenger, Zendesk)
- **Real-time Communication** — implemented Socket.IO-based messaging infrastructure for end-to-end encrypted conversations and notification systems (PubNub)
- **Enterprise Integrations** — developed and maintained connectors and plugins for third-party APIs and internal systems, enabling seamless channel integration
- **Full-stack Development** — built React-based management consoles and Node.js backend services for AI agent orchestration
- **Alexa Smart Properties Project** — developed a management console for senior care facilities using Amazon Alexa devices (AWS partnership)
- **Database Architecture** — designed and optimized relational (MySQL, PostgreSQL) and non-relational (Firebase) database solutions for conversational data

Tech stack TypeScript, React, Vue.js, Node.js, Express, Socket.IO, AWS, Firebase, SQL, REST APIs

Frontend Developer — E-commerce & Web Applications — SpotView S.r.l.

09/2023 – 12/2024

Bologna, Italy

Headless e-commerce development for major retail clients.

- **Headless E-commerce Development** — built responsive frontend applications for high-traffic e-commerce platforms (Tigotà, Pinalli)
- **Component Architecture** — developed reusable UI component libraries and maintained code quality across multiple projects
- **Performance Optimization** — implemented Next.js and React best practices for optimal page load times and SEO
- **Custom Applications** — developed and deployed custom web applications meeting specific business requirements

Tech stack TypeScript, React, Next.js, HTML5, Sass, CSS3

Frontend Developer — ICT-GROUP s.r.l.

12/2020 – 07/2021

Reggio Emilia, Italy

Enterprise software and mobile application development.

- **Enterprise Systems Integration** — integrated modules and added functionalities to company management systems (EGGS Next, EGGS HR)
- **Cross-platform Mobile Development** — developed iOS and Android applications using the Ionic Framework
- **Authentication Systems** — implemented Single Sign-On (SSO) integration for secure user authentication
- **Client Requirements Analysis** — evaluated and analyzed client requests, translating them into technical implementations

Tech stack TypeScript (Angular, Ionic), HTML5, CSS3, PostgreSQL

Full Stack Developer — Studio il Granello s.c.s.

04/2018 – 12/2020

Correggio, Italy

Custom web development and digital solutions.

- **Full-stack Web Development** — designed and developed 15+ complete website solutions from backend to frontend
 - **Web Customization** — implemented UX enhancements and integrated custom functionalities with existing systems
 - **Business Applications** — developed management systems and specialized software for diverse client requirements
 - **Mobile Applications** — created iOS and Android applications (Ionic Framework)
 - **Client Relations** — maintained direct communication with clients to understand needs and deliver tailored solutions
- Tech stack** PHP, JavaScript (Vanilla JS, Vue.js, Angular Ionic), HTML5, CSS3, SQL

Trainee Graphic Designer — Graffo grafica adesiva s.n.c.

11/2017 – 04/2018

Arceto di Scandiano, Italy

Print and digital design services.

- **Graphic Production** — managed print design workflow including cutting, covering, and assembly
- **Digital Design** — created vector graphics and retouched images using Adobe Creative Suite (Illustrator, Photoshop)
- **On-site Installation** — coordinated installation of large-format graphics for commercial and residential projects

FREELANCE PROJECTS

CRM Platform for Electrical Materials Distributor

Custom business management system for offer and client management (B2B sales operations platform)

- Built a modern web application enabling the sales team to manage client offers, quotations, and business workflows
- Full-stack development spanning responsive frontend (Next.js), backend APIs, and database architecture
- Integrated authentication and real-time data synchronization for concurrent user operations
- Deployed to production on Vercel with zero-downtime deployments

Tech stack Next.js (React, Node.js), Supabase (PostgreSQL, Auth, Storage), Vercel, TypeScript

Freelance Web Solutions

Responsive corporate and portfolio websites for multiple B2B and B2C clients

- 3+ production websites with custom integrations and SEO optimization
- Focus on responsive design, performance, and user experience

Tech stack HTML5, CSS3, JavaScript, various backend frameworks

Infrastructure & Self-Hosting

Self-hosted solutions and DevOps infrastructure for personal projects and client systems

- Docker containerization and orchestration for microservices and development environments
- Linux/Ubuntu server administration, system management, and deployment automation
- Self-hosted infrastructure setup and maintenance (monitoring, backups, security)
- CI/CD pipeline configuration and automated deployment workflows

Tech stack Docker, Docker Compose, Linux/Ubuntu, CI/CD tools, deployment automation

EDUCATION

Academy Diploma in Advertising Graphics

10/2017 – 07/2018

Scuola Internazionale di Comics • Reggio Emilia, Italy

Specialized in visual communication, branding, typography, and graphic design principles (EQF Level 6).

High School Diploma in Computer Science & Telecommunications

09/2012 – 07/2017

I.I.S. Blaise Pascal • Reggio Emilia, Italy

Technical degree with focus on computer science and information technology (EQF Level 5).

TECHNICAL SKILLS

Languages & Frameworks JavaScript/TypeScript, React, Next.js, Vue.js, Angular, Node.js, Express

Databases PostgreSQL, MySQL, Firebase, MongoDB

AI & Conversational Systems LLM integration, Generative AI frameworks, Conversational AI & chatbot development, N8N workflow automation

Real-time & Cloud Socket.IO, PubNub, AWS, Vercel, Supabase, Docker

Design Adobe Creative Suite (Photoshop, Illustrator), UI/UX principles, responsive & mobile-first design

Tools & Practices Git/GitHub, VS Code, JetBrains IDEs, Agile/Scrum methodologies

LANGUAGES

Italian Native **English** B2