

Jorge Arraga

AI-Focused Software Engineer

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AVAILABLE FOR FREELANCE PROJECTS

Alongside my current role, I am actively looking for freelance projects and professional collaborations. I am also studying English and set aside time every day to stay current with software engineering, artificial intelligence, and emerging technologies.

PROFESSIONAL SUMMARY

I am an AI-focused software engineer with over 10 years of experience building products and systems across the full stack. I combine distributed architecture, data analysis, and full-stack engineering with AI-assisted development.

I design Specification-Driven Development (SDD) workflows with specialized agents, verifiable contracts, and versioned handoffs. I connect AI to real project sources through the Model Context Protocol (MCP), enabling research, implementation, and validation based on data and evidence rather than assumptions.

I started developing without frameworks using vanilla JavaScript, and progressively adopted modern frontend technologies including React.js, Next.js, Vue.js, Nuxt.js, and TypeScript, focusing on building performant, maintainable, and scalable user interfaces.

On the backend, I began working with Node.js and WebSockets, later adopting NestJS for structured backend development, and eventually specializing in Go (Golang). With Go, I focused heavily on performance optimization, working with logging, metrics, CPU profiling, and memory profiling to analyze and improve system efficiency and reliability.

I have extensive experience in testing, including unit tests, end-to-end tests, and frontend testing with tools like Cypress. I have also performed performance testing, load testing, and system-level performance analysis to ensure scalability and stability under real-world conditions.

In terms of databases, I have strong experience with MongoDB and working knowledge of SQL databases. I have also worked with Elasticsearch and GraphQL, using tools and frameworks such as ORMs and Apollo for efficient data access and API design.

I have deployed and operated applications on cloud platforms such as AWS, including services like EC2 and S3, as well as on DigitalOcean using App Platform and Docker-based deployments.

I am familiar with design and collaboration tools such as Figma and FigJam, and have experience working with the Atlassian suite, including Jira and Confluence, to support planning, documentation, and team collaboration.

Overall, I have experience across the entire software development lifecycle, from architecture and system design to implementation, testing, deployment, post-deployment monitoring, and alerting.

Personally, I am passionate about science, technology, and space exploration. I am a calm person who enjoys spending time at home, playing video games, spending time with friends, and practicing sports such as tennis and running.

EXPERIENCE

AI-Augmented Full Stack Software Engineer | Go, React, Distributed Systems

Staffy | Remote, Argentina | Jun 8, 2026 - Present

Contracted through Staffy for Primus Capital, where I develop a credit risk assessment platform for factoring operations in Peru, working across the full stack and collaborating with business and technology teams.

- Develop full stack solutions with Go, React, TypeScript, Vite, Valtio, and Ant Design, using PostgreSQL, SQL Server, and AWS services including SQS, S3, and IAM.
- Work with APIs, asynchronous processing, distributed systems, CEL, JWT, Docker, CI/CD, automated testing, and data analysis.

- Designed and currently use an AI-assisted Specification-Driven Development process with specialized agents, verifiable specifications, traceable decisions, and versioned handoffs.
- Integrate AI tools through MCP with data sources, documentation, project management, and browser validation, bringing AI into the complete engineering lifecycle without replacing human and technical verification.

Independent Software Engineer | Go, React, System Design

Freelance | Argentina | Oct 2025 - Present

Independent software engineer focused on strengthening backend and full stack expertise through hands-on development and technical exploration.

- Building personal projects such as Data2UI and Kai to deepen knowledge in Go-based services, API design, frontend architectures with React and Next.js, and data-driven interfaces.
- Practicing performance optimization techniques including profiling, benchmarking, and concurrency patterns in Go.
- Experimenting with CI/CD workflows, containerization with Docker, and cloud-ready deployment strategies.
- Continuously consolidating knowledge in distributed systems, observability practices, and scalable application design through practical implementation.

Backend Software Engineer | Go, Microservices, Redis | High-Performance Systems

MercadoLibre | Argentina | May 2023 - Oct 2025

Backend Engineer specializing in shipping cost calculation and delivery promise systems within a distributed microservices architecture using Go.

- Designed and implemented high-performance services optimized for low latency and scalability, leveraging goroutines and sync primitives to process concurrent workloads efficiently. Conducted CPU and memory profiling, benchmarking, and load testing to identify bottlenecks and improve resource utilization.
- Built unit and end-to-end test suites to ensure reliability across complex pricing and logistics flows. Executed load testing with k6 to validate production-scale traffic behavior.
- Implemented CI/CD pipelines, managed version control with GitHub, and deployed containerized services using Docker.
- Integrated Redis for caching strategies and S3-compatible storage for distributed data management.
- Established structured logging, monitoring, and observability practices using Kibana, Grafana, and Datadog. Implemented custom metrics and alerting systems to maintain production stability.
- Delivered scalable backend systems supporting mission-critical logistics operations.

Mid-Level Full Stack Developer | React, Next.js, Node.js, NestJS, TypeScript, GraphQL, Docker

Aerolab Digital | Argentina | Jun 2022 - Apr 2023

Developed and evolved UTEL's international web platform, delivering localized experiences across 17 countries within a scalable architecture.

- Built and maintained frontend applications using React and Next.js with TypeScript, integrating Contentful for multi-region content management. Implemented backend services with Node.js and NestJS, exposing GraphQL APIs consumed via Apollo. Managed CI/CD pipelines and containerized services with Docker to support reliable multi-country deployments.

Mid-Level Web Developer | Vue, Nuxt.js, TypeScript, Node.js, Tailwind CSS

Aerolab Digital | Argentina | Nov 2021 - Jun 2022

Developed and maintained the Coderhouse marketing and course platform during my first stage at Aerolab, building responsive and scalable frontend applications using Vue and Nuxt.js with TypeScript.

- Implemented server-side rendering and optimized performance for high-traffic educational campaigns. Integrated Node.js services for dynamic content handling and leveraged Tailwind CSS to create consistent, maintainable UI components aligned with the product's design system.

Full Stack Engineer | Next.js, NestJS, Redis | Scalable E-commerce Systems

Darwoft | Cordoba, Argentina | Mar 2021 - Oct 2021

Developed Claro's online store, implementing both the frontend storefront and a Backend-for-Frontend architecture.

- On the frontend, I built and maintained a high-traffic e-commerce platform using Next.js and React, powered by a custom Express server for enhanced security, caching, and performance optimization. The application integrated a headless CMS (Contentful), Google services (Maps & reCAPTCHA), and implemented a modern UI architecture using Material-UI, Framer Motion, and SWR for performant user experiences.

- On the backend, I developed a NestJS (TypeScript) Backend-for-Frontend, organizing business domains such as catalog, cart, orders, customers, authentication, payments, and SEO into modular services. Implemented JWT-based authentication, validation with class-validator, API documentation via Swagger, and caching strategies using Redis to improve performance and scalability.
- Ensured code quality and reliability through unit and e2e testing (Jest, Supertest), linting standards (ESLint + Prettier), and CI-ready workflows.
- Delivered a scalable, secure, and performance-oriented e-commerce platform serving a major telecom brand.

Full stack web developer

Freelance | Argentina | Aug 2020 - Mar 2021

Full stack development with Vue.js and TypeScript on the frontend, and NestJS and MongoDB on the backend.

Development Lead

Crosetto Ingeniería S.A. | Argentina | Mar 2019 - Jul 2020

Responsible for application development using JavaScript on the frontend, Node.js on the backend, Elasticsearch, and socket-based communication.

PLC Programmer

Crosetto Ingeniería S.A. | Argentina | Oct 2015 - May 2018

PLC programming using SEW and Siemens systems.

Technical Drafter and PLC Programmer

FRIAR S.A. | Argentina | Sep 2013 - Sep 2015

Technical drafting and Siemens PLC programming.

Retail and Wholesale Salesperson

Elias Yapur S.A. | Argentina | Jun 2011 - Sep 2013

Technical Drafting and Documentation Assistant

Helpport S.A. - Gueretchet S.A. - UTE | Argentina | Aug 2009 - Dec 2010

Technical Drafting and Documentation Assistant

Helpport S.A. | Argentina | Jun 2008 - Aug 2009

SKILLS

AI software engineering

AI-assisted software engineering · Specification-Driven Development (SDD) · Multi-agent development · Model Context Protocol (MCP) · Claude Code

Backend & distributed systems

Go (Golang) · Microservices · Node.js · NestJS · GraphQL · REST APIs · gRPC · WebSockets · GORM · TypeORM · Express.js · Bun · JWT · Common Expression Language (CEL)

Frontend & user experience

TypeScript · React.js · Next.js · Tailwind CSS · HTML · CSS · JavaScript · Vue.js · Nuxt.js · Contentful · Chakra UI · Material UI · Ant Design · Framer Motion · SWR · Vite · Valtio · React Router

Data & persistence

MongoDB · Redis · MySQL · SQL · Elasticsearch · Amazon S3 · Firebase · PostgreSQL · Microsoft SQL Server

Quality, performance & observability

Kibana · Datadog · Grafana · k6 · Unit testing · End-to-end testing · Cypress · Jest · Supertest · Chrome DevTools

Cloud, DevOps & delivery

Git · GitHub · GitLab · Docker · CI/CD · AWS SQS · Cloudflare · Amazon EC2 · DigitalOcean · Heroku · Linux · Command line

Platforms & tools

PHP · Java · Visual Studio Code · GoLand · Postman · Android Studio · Android · Figma · FigJam · Jira · Confluence

LANGUAGES

English — Reading and listening: Intermediate; Speaking and writing: Basic.

EDUCATION

Continuous Self-Directed Learning in Software Engineering

Independent Study | Argentina | 2015 — Present

Electromechanical Equipment and Installations Technician

E.E.T. No. 461 Gral. San José de San Martín | Argentina | 2001 — 2006