

hernán pereyra

CEL (598) 97 746 504 • E-MAIL ingenierart3@gmail.com



PROFILE

Computer technologist & multilingual software developer

with over 15 years of experience in the industry. Since 2017 dedicated to the Javascript ecosystem and cutting-edge technologies.

Customer orientation and team work.

Promoter of good software engineering practices as well as exhaustive technological analysis to create the best possible product.

Proactive, continuous improvement.

Process, scrum / agile.

EDUCATION **National Computer Science & Work University**

Computer Technologist, 2010 - 2014

Economy & Administration University

Public Accountant, 2005 - 2008

SKILLS

Programming: Javascript, Node.js, TypeScript, Vue.js, Angular.js, React.js, Svelte.js, Java, Php, C/C++, Python, Express.js, Sails.js, Genexus

Web design: HTML5, CSS3, Sass, Bootstrap, Tailwind, MaterialUI

Data: MongoDB, CouchDB, PostgreSQL, Oracle, SQLServer, MySQL, MariaDB, Redshift

Managment: Atlassian, Asana, Trello

Languages: English (intermediate), Spanish (native)

More: AWS, Docker, GIS, Geomoose, GeoServer, Mapserver, Rest & Soap Apis, Web design, Unit testing,

EXPERIENCE (Founder & Lead Architect — IA3 (Artificial Intelligence Atelier))

2023 – Present

Founder of IA3, an independent software atelier focused on the design, architecture, and implementation of AI-driven systems, intelligent agents, and scalable digital platforms. I lead projects end-to-end, combining deep technical execution with product vision, research, and applied innovation.

Key Responsibilities & Achievements:

AI Agents & Orchestration

Designed and implemented agent-based systems with memory, tool usage, and orchestration layers, enabling autonomous and semi-autonomous behaviors for real-world use cases (automation, decision support, content systems, IoT, and operational intelligence).

System Architecture & Engineering Leadership

Defined architectures for distributed, scalable systems using modern stacks (Node.js, TypeScript, Python, Elixir, React, Svelte, Docker, PostgreSQL, MongoDB, CouchDB), with strong focus on modularity, observability, and long-term maintainability.

Applied AI & Intelligent Workflows

Integrated LLMs, vector databases, and custom inference pipelines into production systems, enabling features such as intelligent assistants, automated workflows, memory-augmented agents, and adaptive decision logic.

Product & Platform Development

Built and evolved SaaS platforms from concept to production, including multi-tenant systems, dashboards, APIs, and automation layers. Balanced technical excellence with real business constraints and user experience.

IoT, Real-Time & Data-Driven Systems

Architected and developed real-time applications integrating IoT devices, messaging protocols (MQTT, WebSockets), data pipelines, and monitoring layers, connecting physical systems with AI-powered software platforms.

Agile Leadership & Technical Direction

Acted as technical lead, architect, and product partner for startups, accelerators, and independent clients. roadmaps, led agile processes, performed code reviews, and mentored developers.

Research-Driven Development

Constantly explored emerging technologies (AI agents, distributed systems, edge computing, cognitive architectures), translating research concepts into practical, deployable solutions.

Impact

Delivered multiple production-grade systems combining AI, automation, and real-time data.

Helped startups and organizations move from proof-of-concept to scalable architectures.

Positioned IA3 as a flexible, high-trust technical partner for complex, non-trivial engineering challenges.

(2025 **Consultancy service at Alsacia / startups accelerator** in Uruguay
**Architect & IoT App Designer, Technical/Team Leader,
Scrum master**)

Key responsibilities include:

Architecture & Design: Leading the design and architecture of scalable, maintainable applications using Docker/Compose, C++, Python, Socket.io, MQTT, Javascript, Vite (module federation), React, Typescript, Node, Flutter (flavors) for IoT, AI, ML, and real-time systems. I designed the entire framework, the Architecture of a real-time iot super app and the design of the repos, both proofs of concept and the final microservices orchestration solution to be able to scale any layer. The backend as a frontend as a Mobile works as an isolated app or submodule of the general application.

Dev Cycle & Agile Leadership:

Implementing and managing efficient development cycles using GitFlow, Jira, and Scrum methodologies. I ensure alignment with the company's goals while fostering an agile and collaborative environment.

Code Reviews & Quality Assurance:

Conducting comprehensive code reviews to ensure high-quality, maintainable, and optimized code is delivered by the team.

Mentorship & Team Collaboration:

Mentoring developers, fostering a culture of continuous learning, and facilitating smooth communication both within and between Agile teams.

Client-Centric Approach:

Maintaining a strong focus on client needs, ensuring our solutions are aligned with their objectives and add significant value. ITIL Practices: Implementing ITIL 3 and 4 best practices to enhance service management processes and improve overall team efficiency.

Leadership & Strategic Alignment:

Ensuring the team's efforts align with the company's software factory goals and strategic initiatives, driving innovation and consistency in all projects. In my role, I focus on driving excellence, innovation, and efficiency, enabling our team to deliver high-quality solutions that meet the complex demands of IoT, AI, and real-time application development.



(Syd 2023 – 2024 , **UTE (National Electric Energy supplier Uy)**
Senior Software Development Engineer

References: Pablo Esponda +598 99 588 327)

JavaScript / .NET Framework / c# / JQuery / Bootstrap / Android / SQLServer
CSS3 / HTML5

Web, desktop, mobile (android) and console development (scrum/agile team) Bootstrap and JQuery migrations, DB maintenance. Migrations of many app layers.



(**Modelit** 2021-2023, **Senior Full Stack Engineer / TeamLead**
References: Diego Febles / Emiliano González +598 2624 1790)

FairTrade USA

Javascript / Nodejs / Amazon Lambda, Redshift / Php LaravelJest test / Vue2/3
Vuex / Pinia

Full stack development (scrum/agile team), it expert, app re design for multitenant scalable product.



(**Switch Software Solutions** 2020-2021, **Javascript Engineer**
References: Miqueas Castroman +598 2710 1708)

TATA - Web Promotions

Javascript / Angular / Testing library,
Front-end development

Logysin

Javascript / Angular / Nodejs / Testing library

Full stack development (scrum/agile team), it migrations, re design and app improvement, database design and managment.

Free Pass app

Javascript / Nodejs / Express / Angular / Testing library / Mysql

Full stack development, app maintenance & production support

Pase Libre

Javascript / Angular / Nodejs / Testing library / Mysql

Full stack development, app maintenance & production support



(**IBM** 2017-2020, **Senior Software Development Engineer**
References: Fernando González Clavijo +598 99 834 958)

GIS ANP (National Port Administration of Uruguay)

Javascript / React / Geomoose / Mapserver / PostgreSQL/ PostGIS / GIS architecture

IT expert for GIS backend migration from MapServer to Geoserver, front-end development using React, OpenLayers, Geomoose, data analysis and database migration

SGC ANP

Javascript / Java / SQLServer / Genexus

Business analysis, app design, implementation (scrum/agile team)

SGP ANP

Javascript / Java / SQLServer / Genexus

Business analysis, app design, implementation (scrum/agile team)



(Hexa 2014-2017, Senior Software Developer

References: Federico Lawlor +598 99 665 459)

Production support at BROU

Java / Javascript / Web / SQLServer / Genexus / others

Maintenance & ad-hoc response on production apps

Budget Management app at BROU

Genexus / Javascript / Java / SQLServer

Business analysis, app design, implementation (scrum/agile team)

Credits Management app at BROU

Java / SQLServer / Javascript / Genexus

Business analysis, app design, implementation (scrum/agile team)

Equital s.a.

(Equital 2010-2014, Software Developer

References: Alejandro Grecco +598 99 462 586,
Ramón Cubilla +598 91 609 056)

National tv cable company

Genexus / Java / Android / Visual Fox Pro / Oracle / SAML 2.0

Web, mobile & desktop development, app design, implementation (scrum/agile team)

<https://hernanpereyra.ia3.art>

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