

Tony Rodríguez

Software Engineer

Contact

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About me

Software Engineer with a strong product and business mindset, specialised in automation, applied AI and digital transformation for construction and real estate.

Over 20 years of experience in the construction sector, including more than 6 years as founder & CEO, with hands-on exposure to operations, budgeting, cost estimation, client management and on-site decision-making.

Currently focused on building practical, production-ready software that improves operational efficiency and supports better decisions through data and AI.

Technical Skills

- **JavaScript, Python, SQL**
- **React, Node.js, Express, Django**
- **REST APIs, PostgreSQL, MongoDB**
- **Git, GitHub, Postman, Linux**

AI & Automation

- **Applied Artificial Intelligence**
- **Machine Learning (scikit-learn, pandas, NumPy)**
- **Data processing & analysis**
- **Process automation**
- **Decision-support systems**

Domain Expertise

- **Construction & Real Estate**
- **Cost estimation & budgeting**
- **Operations & workflows**
- **Client and project management**

Interests

I'm interested in projects where technology creates measurable impact in real-world operations, particularly in construction, real estate and operations-heavy environments.

I enjoy working at the intersection of technology, business and execution, improving how teams work through automation, better data and pragmatic use of AI.

I'm especially drawn to initiatives focused on digital transformation, industrialisation and building tools that are actually adopted by the people who use them.

General Assembly

Jun 2025 – Sep 2025

Software Engineer Graduate

- Completed immersive full-time training in full-stack web development.
- Built 4 projects (solo and group) applying agile workflows, Git version control, and modern stacks.

Selected Projects:

- TradeLab | React, Django, PostgreSQL – Trading backtesting platform integrating external data and optimized datasets; recognized by GA instructors as one of the best projects.
- Re-Lux | React, Node.js, MongoDB – Luxury second-hand e-commerce app with authentication, shopping cart, and image management.
- BuildApp | MEN stack – Platform connecting clients with construction professionals; implemented authentication, profiles, and responsive UI.
- Tetris | JavaScript, HTML, CSS – Solo project recreating the classic game with DOM manipulation and JS logic.

Total Homes (@totalhomes.es)

2019–2025

Founder & CEO

- Founded and managed a boutique construction and renovation company, delivering high-quality residential projects.
- Led cross-functional teams, budgets, and timelines from concept to delivery.
- Known for creativity and client focus: translated customer needs into innovative, functional designs.
- Developed digital workflows to improve transparency and efficiency in projects.

Casex O.I., Barcelona (www.casex.es)

2003–2019

Project Manager

- Managed residential projects, budgets, and client relationships.
- Oversaw sales strategies, market studies, and new client acquisition.

EDUCATION

2025	CS50's Introduction to Artificial Intelligence with Python Harvard University
2025	Software Engineering Bootcamp General Assembly 420 hours
2019 – 2020	Certified Passive House Consultant & Tradesperson Energiehaus Arquitectos / PassivHaus Institut
2001 – 2003	Architecture (coursework completed) Universitat Internacional de Catalunya
1983 – 1996	High School Studies (Bilingual English/Spanish) & Proficiency Certificate American School of Barcelona