

GONZALO MARTIN PEÑALBA

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www.gonzalomartin.dev

EDUCATION

Honours Degree in Digital Technology & Management

Expected Graduation: June 2026

Center for Digital Technology and Management (CDTM)

Selective interdisciplinary program for top-performing students, focused on developing skills in technology, innovation, and entrepreneurship through hands-on projects and collaboration with leading businesses.

BSc Industrial Computer Science and Robotics

Expected Graduation: June 2026

Valencia Polytechnic University (UPV)

Relevant coursework: Machine Learning, Computer Vision, 3D Vision, Mobile Robotics, Intelligent Agents, DSA

International Baccalaureate (IB)

Sept 2020 - June 2022

Rigorous pre-university curriculum focused on independent research, critical thinking, and global perspectives.

U.S. Dual Diploma

Sept 2018 - June 2021

Completed U.S. high school concurrently with national studies, graduating with Honor Roll distinction.

WORK EXPERIENCE

Data Science Internship – Manufacturing & Predictive Analytics (Ford)

Dec 2025 - June 2026

Ford Motor Company

- Developed scalable data pipelines and analytics solutions on Google Cloud (BigQuery, Dataform, Vertex AI, Looker Studio) to monitor manufacturing quality and enable real-time root-cause analysis.
- Built and deployed predictive machine learning models in Python to estimate component failure probability, supporting proactive maintenance actions to reduce scrap, warranty claims, and production downtime.

Managing Product Development (MPD) Project (CDTM)

Sept 2025 - Dec 2025

Valencia Innovation Capital & Placenet

- Lead the development of an MVP to address engagement and security challenges in Valencia's urban spaces.
- Conducted user research, ideation, prototyping, and validation with stakeholders to refine the solution.

Research Project: Future of Urban Spaces in Valencia (CDTM)

June 2025 - August - 2025

Valencia Innovation Capital

- Conducted foresight research on urban innovation across multiple domains and developed an innovation concept with an early MVP selected for further development.
- Led communication and coordination across interdisciplinary teams, and co-authored a book.

Systems Installer

June 2023 - August - 2023

Winnercon

- Performed testing and troubleshooting of hardware and software components to guarantee optimal performance.

PROJECTS

AI-Powered Product Recommendation System

- Scraped data from Mercadona asynchronously and used a combination of an LLM and a VLM for text and image-based normalization (e.g., brand, allergens, claims, nutritional info).
- Developed an agentic system that responds to user queries based on the processed data, with a dual-database architecture: relational for fast filtered lookups and vector for semantic search.

Customer Relationship Management (CRM)

- Developed a CRM web application to streamline customer relationship management through automated lead tracking, agent assignment workflows, and category-based pipeline organization.
- Enabled team collaboration and sales optimization with role-based access controls and real-time customer data management.

Valencia Price Housing Predictor

- Developed a machine learning model using web-scraped real estate data from Idealista to predict housing prices in Valencia.
- Predicted housing prices with **75%** accuracy, showcasing strong model performance.