

# Ricardo Crespillo Romero

## AI-assisted Software Developer | Python + React + LLM Apps | Automation, Data & Product Builder

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## Professional Profile

Software, data and applied AI developer with professional experience in Python, SQL, model validation, automation and data-driven systems, plus a personal portfolio of AI products, web applications, voice agents, dashboards, internal tools and full-stack prototypes.

My profile is especially aligned with **AI-first Developer**, **AI-assisted Software Developer**, **LLM Application Developer**, **AI Automation Developer**, **Product Engineer**, **Developer Tools Engineer**, **Full-Stack Developer**, **Technical AI Workflow Specialist** and **Vibe Coding Specialist** roles. I bring a practical combination of real-world experience in data, validation, AML systems and demanding delivery environments, together with the ability to build my own products using AI, APIs, frontend, backend, automation and technical documentation.

I use generative AI and vibe coding workflows as a productivity multiplier: assisted research, product specs, initial architecture, scaffolding, API integration, debugging, refactoring, testing, documentation and iterative improvement. I do not treat AI as a black box: I validate outputs, review code, document assumptions and focus on making each deliverable understandable, maintainable and useful for the business.

## Value Proposition

- **Builder with public evidence:** bilingual AI portfolio at <https://rcr-ia.eu/> with personal projects focused on LLMs, automation, voice, dashboards, product and internal tools.
- **AI-first development with judgment:** hands-on use of Codex, ChatGPT, LLMs and vibe coding workflows to accelerate development while keeping human review, traceability and quality.
- **Bridge between data and product:** able to turn datasets, business rules, APIs and manual processes into usable applications, dashboards and workflows.
- **Rapid prototyping mindset:** I move from idea to brief, from brief to specification, from specification to MVP, and from MVP to documented iteration.
- **Real technical foundation:** Python, SQL, JavaScript/TypeScript, React, Next.js, FastAPI, Flask, Node.js, SQLite/PostgreSQL, APIs, testing and documentation.
- **Validation rigor:** professional experience with models, metrics, data consistency, functional QA, rules, thresholds, traceability and critical systems.
- **Technical communication:** I write documentation, explain decisions, translate technical issues into business language and leave reviewable deliverables.
- **Autonomy:** comfortable working with ambiguity, researching, making decisions, building and closing deliverables without needing overly detailed instructions.

## Career Objective

I am looking for remote or hybrid roles in product teams, startups, SaaS, applied AI, internal tools, automation, data platforms or developer tooling. I am interested in positions where fast building, experimentation, learning new tools, responsible AI use, documentation and functional software delivery are valued.

### Target roles:

- AI-assisted Software Developer
- AI-first Developer
- LLM Application Developer
- AI Automation Developer
- Product Engineer

- Developer Tools Engineer
- Python Developer
- Full-Stack Developer
- Internal Tools Developer
- Technical AI Workflow Specialist
- Vibe Coding Specialist
- Product-oriented Data / ML Developer

## Fit for Vibe Coding / AI-First Roles

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- I have built applied AI projects instead of relying only on courses or theory.
- I use prompts, specs and coding agents to accelerate ideation, development, debugging and documentation.
- I can work with incomplete information: I turn an ambiguous need into structure, backlog, interface, data flow and deliverable.
- I can create demos, MVPs, dashboards, snippets, templates and tools that other people can test or extend.
- I understand that the value is not only in generating code, but in reviewing, integrating, testing, explaining and making it work for a real use case.
- I have the judgment to detect AI output errors, data inconsistencies, weak assumptions and business logic failures.
- I am product-oriented: usable interface, clear flow, understandable data, documentation and a path to the next iteration.
- I can collaborate with non-technical teams because I come from environments where the result must be clear to business, risk, audit or client stakeholders.

## Professional Experience

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### KPMG Spain -- Madrid, Spain

2022 - Present

I build analytical solutions, automations, validations and technical deliverables in data, risk, model and AML system environments. I work with Python, SQL, notebooks, scripts, technical documentation, business rules, reproducible outputs and functional system validation.

#### Responsibilities and contributions:

- Developed analytical solutions with Python, SQL and data tools to prepare datasets, validate information and automate technical controls.
- Built analysis pipelines, variable exploration workflows, segmentation logic, consistency validations and reproducible outputs.
- Created notebooks, scripts, technical deliverables and documentation so that processes can be reviewed, maintained and executed by other teams.
- Evaluated predictive models and data-driven systems using metrics such as IV, Gini, AUC, PSI, stability, sensitivity, distributions and performance analysis.
- Configured, functionally tested and validated AML systems end-to-end, including Transaction Monitoring, Customer Screening and Payments Screening.
- Analyzed rules, thresholds, false positives, alerts and data flows to improve operational quality and production system behavior.
- Validated counts, joins, segmentations, transformations and technical outputs to detect inconsistencies before they reach business users.
- Documented results, incidents, validation criteria, technical decisions and testing evidence.
- Worked with multidisciplinary teams in demanding environments, bringing autonomy, clear communication, technical judgment and delivery focus.
- Adapted to changing requirements, tight timelines and contexts where data quality, traceability and explainability are critical.

#### Direct transfer to AI-first roles:

- Model and data validation experience provides strong judgment for evaluating LLM apps, agents, RAG workflows, structured outputs and automations.
- Experience with rules, thresholds, alerts and false positives transfers directly to AI evaluation systems, QA workflows, guardrails and quality control.
- Technical documentation and traceability map well to turning AI prototypes into reliable and maintainable tools.

### Stack and domains:

- Python, SQL, notebooks, scripts, data analysis, model validation, statistical metrics, functional QA, AML, Transaction Monitoring, Customer Screening, Payments Screening, technical documentation.

## EY Spain -- Madrid, Spain

### Data Analyst / Technical Analyst

2021 - 2022

Early professional experience in technical analysis, data validation, anti-money laundering, AML systems and functional documentation. Worked with rules, scenarios, alerts, data flows and testing in transaction monitoring systems.

### Responsibilities and contributions:

- Analyzed and validated data for anti-money laundering projects, ensuring information consistency, traceability and quality.
- Configured, reviewed and tested scenarios in NetReveal for Transaction Monitoring.
- Checked rules, thresholds, alerts, incidents and data flows to detect functional and technical issues.
- Documented technical and functional results, tests, incidents and validations to support tracking and decision-making.
- Supported distributed teams through clear communication, task follow-up, evidence control and deliverable preparation.
- Built judgment for understanding complex systems where data, rules, users and operational processes must align.

### Direct transfer to AI-first roles:

- Solid foundation in functional testing, system reading, rule analysis and explaining results.
- Experience working with technical tools and processes where data traceability is essential.
- Failure-detection, validation and documentation mindset applicable to AI products.

## Independent AI Product Experience

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### AI / LLM Product Builder -- Personal Projects and Portfolio

#### Independent development, prototyping, automation and vibe coding

Portfolio: <https://rcr-ia.eu/>

I have created a personal portfolio of AI products and prototypes designed to demonstrate real building ability, not only theoretical knowledge. These projects cover voice AI, agents, automation, dashboards, pipelines, forms, internal tools, SaaS product, pricing, data and visualization.

### Work areas:

- Built a bilingual portfolio focused on AI, LLMs, automation, data, internal tools and AI-assisted development roles.
- Developed MVPs and prototypes combining Python, JavaScript/TypeScript, React, Next.js, FastAPI, Flask, Node.js, APIs, SQLite/PostgreSQL and AI tools.
- Designed product-focused applications: dashboards, forms, admin panels, automations, calculators, voice agents, discovery pipelines and business tools.
- Created specs, prompts, QA flows, smoke tests, data validations and documentation to turn ideas into clear deliverables.
- Used AI to accelerate research, architecture, code generation, refactoring, debugging, technical writing and interface improvement.
- Integrated models, APIs and business rules into usable experiences for technical and non-technical users.
- Iterated on personal products: problem definition, MVP scope, data structure, interface, edge cases, testing and documentation.

### Demonstrated strengths:

- Ability to build without waiting for a perfect brief.
- Judgment to choose the right stack for the product.
- Product sensitivity so that the tool is actually usable.
- Knowledge across frontend, backend, data, AI, APIs and QA.
- Ability to explain and package technical work in a portfolio.

## Selected AI, Product and Automation Projects

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## Credit Risk Model PD Validation Copilot

Application for validating PD models with a synthetic dataset, code-calculated metrics, executive filters and a reviewable technical report.

- Dashboard with filters by time window, PD risk and LTV buckets to review stability and model behavior.
- Calculates and presents AUC, Gini, calibration, PSI, coverage, drift, PD score and observed default.
- Executive summary connected to quantitative evidence, data dictionary and source traceability.
- Stack: Next.js, React, TypeScript, synthetic dataset, metric visualization, PD validation.
- Demonstrated skills: credit risk, model validation, data product, executive reporting, traceability and quantitative judgment.

## Velnorweb: navigable web demo catalog

Catalog of navigable demos for selling commercial websites, SaaS MVPs and automations with editorial structure, phased proposals and conversion focus.

- Public presentation of web verticals: landing pages, corporate websites, ecommerce, SaaS MVPs, custom applications and automations.
- Commercial approach through demos, service packages, delivery phases, value proposition and decision-oriented navigation.
- Combines storytelling, premium UI, responsive design and visual assets to turn technical capability into a sellable offer.
- Stack: Next.js, React, TypeScript, responsive design, commercial content, visual QA.
- Demonstrated skills: commercial product, premium frontend, positioning, conversion, service catalog and web delivery.

## Vibe Coding QA Gate

Tool for reviewing AI-generated projects before production: secrets, dependencies, endpoints, tests, auth, TypeScript, accessibility and prompt injection.

- Release gate with GO / NO GO decision, scoring, priority blockers and actionable severities.
- Conceptual pipeline with GitHub API, gitleaks, trufflehog, semgrep, eslint, Playwright and LLM-assisted explanation.
- Risk map by category: secrets, dependencies, API validation, coverage, auth, TypeScript, accessibility and prompt injection.
- Stack: Next.js, React, TypeScript, GitHub API, Gitleaks, Semgrep, Playwright, LLM guardrails.
- Demonstrated skills: enterprise QA for AI, defensive security, developer tooling, accessibility, testing and evaluation of generated outputs.

## Personal Talent Map

Interactive application for exploring people, CVs, knowledge, mastered domains, projects and internal relationships.

- Filterable map by area, specialty and project with search, zoom, labels and profile detail panel.
- Data model connecting people, roles, skills, projects and domains such as product, technology, growth, operations, culture and data.
- Interface designed for fast reading of capabilities, connections and talent distribution inside an organization.
- Stack: React, TypeScript, Next.js, data map, interactive UI.
- Demonstrated skills: knowledge visualization, frontend architecture, relationship modeling, exploratory UX and internal product design.

## AI Outbound Phone

Full-stack system for outbound AI phone calls with an operational dashboard.

- Dashboard for call management, history, events, transcription and operational status.
- Planned integration with Asterisk ARI, SIP trunk, RTP G.711 and OpenAI Realtime.
- End-to-end simulator to validate the flow before connecting real telephony.
- Commercial base recovered from local Markdown.
- Compliance rules, forbidden-prefix blocking and controls to avoid unwanted use.
- Stack: Node.js, TypeScript, Fastify, React/Vite, Asterisk, OpenAI Realtime, SQLite.
- Demonstrated skills: voice AI, real-time apps, system integration, compliance, dashboards, simulation testing, operational product thinking.

## AI Inbound Phone

Inbound voice agent for handling forwarded calls and recording interactions.

- Conceptual connection with Flash Telecom, Asterisk, External Media and OpenAI Realtime.
- Dashboard with system status, active calls, history, transcriptions and settings.
- Local knowledge file to control instructions, context and agent behavior.
- Simulator to validate conversations and events without depending on real calls.
- Stack: Fastify, React, Vite, Asterisk ARI, OpenAI Realtime, SQLite, Zod.
- Demonstrated skills: voice agents, realtime LLMs, events, operational UX, configuration, traceability and conversation control.

## AI Business Scout

Pipeline for discovering, summarizing and prioritizing business opportunities from AI-related content.

- Ingests YouTube videos related to AI, AI implementation and business opportunities.
- Summarizes, extracts, structures and prioritizes ideas.
- Preserves provenance to track where each insight comes from.
- Validates structured outputs with JSON Schema.
- Scores opportunities from 0 to 100 and estimates profitability scenarios.
- Exports an operational workbook for later analysis.
- Stack: FastAPI, Next.js, Python workers, JSON Schema, Excel export, YouTube APIs.
- Demonstrated skills: automated discovery, LLM/data pipelines, evaluation, structured outputs, research automation, business product thinking.

## Forms to Beautiful PDF

Local application for converting form responses into polished A4 PDFs.

- Input from CSV, JSON or manual paste.
- Detects sources such as Typeform, Google Forms or generic forms.
- Data normalization and variable mapping.
- Preview generation and downloadable PDF.
- Tests for core logic.
- Stack: Python 3.13, Flask, ReportLab, Pytest, CSV/JSON adapters.
- Demonstrated skills: document automation, parsing, PDF generation, simple UX, validation, testing.

## Portfolio AI/LLM

Bilingual personal website presenting experience, positioning and AI projects.

- Hero section with lightweight 3D visual, value proposition and CTAs.
- Sections for experience, skills, featured projects and contact.
- Copy oriented toward AI-assisted development, LLM apps, automation and internal tools.
- KPMG/EY experience reframed toward software, data and validation.
- Basic SEO metadata with Open Graph and Twitter summary.
- GSAP animations with `prefers-reduced-motion` support.
- Decorative Three.js scene with pause on hidden tab and limited pixel ratio.
- Stack: React, Vite, Three.js, GSAP, responsive CSS.
- Demonstrated skills: technical personal brand, frontend, performance, basic accessibility, professional storytelling.

## Technical Skills

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### Languages and fundamentals

- Python
- JavaScript

- TypeScript
- SQL
- R
- HTML / CSS
- Fundamentals of data structures, functions, APIs, scripting, automation and analysis.

## **Backend, APIs and systems**

- FastAPI
- Flask
- Node.js
- Fastify
- REST APIs
- External API integration
- Asyncio
- Payload validation
- JSON Schema
- MVP architecture
- Endpoint design
- Data and business-rule integration

## **Frontend, product and dashboards**

- React
- Next.js
- Vite
- Streamlit
- Operational dashboards
- Admin panels
- Forms
- Internal tool interfaces
- Business-oriented UI
- Responsive design
- Data visualization

## **AI, LLMs and agents**

- OpenAI APIs
- OpenAI Realtime
- LLM apps
- AI agents
- Prompt systems
- RAG / retrieval-oriented workflows
- Structured outputs
- JSON Schema for AI outputs
- Response evaluation
- Output traceability
- Agent and automation QA
- Knowledge files
- AI workflow design

## Vibe coding and AI-assisted development

- OpenAI Codex
- ChatGPT
- Lovable-style workflows
- Assisted code generation
- Assisted refactoring
- Assisted debugging
- AI-supported spec creation
- Reusable prompts
- Assisted technical documentation
- Rapid MVP iteration
- Human review of generated outputs

## Data, machine learning and analytics

- Pandas
- NumPy
- scikit-learn
- PyTorch
- TensorFlow
- Jupyter Notebook
- Exploratory analysis
- Dataset preparation
- Variable validation
- Model validation
- Performance metrics
- Segmentation
- Stability and sensitivity
- Result visualization

## Databases and persistence

- SQLite
- PostgreSQL
- MySQL
- Oracle
- Basic data modeling
- SQL queries
- Integrity and consistency
- Local persistence for MVPs
- Excel / workbook export

## Testing, QA and tooling

- Git
- GitHub
- Docker
- Linux
- Pytest
- Playwright

- Smoke tests
- Functional validation
- End-to-end simulators
- Technical documentation
- Edge-case control
- Output review

## Finance, risk and AML domain

- Probability of Default
- IV
- Gini
- AUC
- PSI
- RWA
- AML
- Transaction Monitoring
- Customer Screening
- Payments Screening
- Rules, thresholds, alerts and false positives
- Model validation
- Data traceability and quality

## AI Working Method

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- 1 **Understand the problem:** identify the user, goal, constraints, available data and expected result.
- 2 **Turn ambiguity into a brief:** define scope, use cases, inputs, outputs, risks and acceptance criteria.
- 3 **Design the flow:** lightweight architecture, stack, data model, APIs, components, states and errors.
- 4 **Use AI to accelerate:** generate scaffolding, explore alternatives, create snippets, prepare tests and documentation.
- 5 **Review as a developer:** read the code, validate assumptions, test edge cases and correct inconsistencies.
- 6 **Deliver something usable:** demo, dashboard, local app, endpoint, document, simulator or workflow.
- 7 **Document and prepare the next iteration:** explain decisions, limitations, setup and improvements.

## Transferable Technical Experience

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### Model Development & Data Validation Workflows

- Prepared modeling datasets, exploratory analysis and variable validation.
- Developed segmentations, performance evaluation and reproducible technical outputs.
- Implemented quality controls, count validations, data traceability and documentation.
- Used statistical and performance metrics to detect problems, compare alternatives and justify technical decisions.
- Applied analytical judgment to distinguish between technically correct output and business-useful results.

### AI Automation, Tooling & Internal Products

- Designed flows to reduce manual work through scripts, dashboards, automations and internal tools.
- Integrated data, APIs and business rules into applications for users or internal teams.
- Defined specs, acceptance criteria, functional tests and documentation for reviewable software delivery.
- Built prototypes pragmatically: solve the main flow, validate usefulness and prepare iteration.
- Used AI as a development copilot, not as a replacement for technical judgment.

## AML Systems Configuration & Testing

- Configured and tested scenarios in transaction monitoring and screening systems.
- Validated deployments, data flows, rules, thresholds and end-to-end behavior.
- Analyzed alerts, false positives and rule effectiveness to improve operational quality.
- Documented results, evidence and detected issues.
- Experience in environments where errors have operational impact and require traceability.

## Technical Communication & Documentation

- Wrote technical and functional documentation.
- Explained analytical results to teams with different technical levels.
- Prepared reviewable deliverables.
- Translated complex problems into clear structure.
- Documented decisions, assumptions, limitations and execution steps.

## Professional Strengths

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- Fast learning of new tools and stacks.
- Autonomy in ambiguous environments.
- Product mindset, not only task execution.
- Ability to build functional prototypes.
- Rigor in validation, data and documentation.
- Strong communication with technical and non-technical profiles.
- Real interest in applied AI, agents, automation and internal tools.
- Ability to connect business needs with technical implementation.
- Discipline to review AI-generated outputs.
- Delivery, iteration and continuous improvement mindset.

## Education

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- **Bachelor's Degree in Computer Science & Artificial Intelligence**, UAX - Universidad Alfonso X El Sabio, Madrid -- In progress
- **Higher Degree in Web Application Development**, IES Pedro Espinosa, Antequera

## Languages

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- **Spanish:** Native
- **English:** B2-C1, professional working proficiency

## Work Model and Availability

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- **Target model:** remote, remote-first or hybrid.
- **Time zone:** Spain / Europe.
- **Availability:** oriented toward international roles, asynchronous teams and autonomous environments.
- **Preferences:** product, applied AI, LLM apps, automation, developer tooling, dashboards, internal tools, APIs, data and rapid prototyping.

## ATS Keywords

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AI-assisted development, AI-first developer, vibe coding, LLM application developer, AI automation, product engineer, developer tools, Python developer, full-stack developer, React, Next.js, TypeScript, JavaScript, FastAPI, Flask, Node.js, APIs, SQL, SQLite, PostgreSQL, OpenAI, OpenAI Realtime, AI agents, prompt engineering, RAG, JSON Schema, structured outputs, dashboards, internal tools, automation, data validation, model validation, AML, QA, Playwright, Pytest, Git, Docker.