JOSE LUIS MARTÍN

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Senior Software Engineer · AI Agents & AI-Assisted Development · .NET · Azure · XBRL · GIS

JOSÉ LUIS MARTÍN PÉREZ

01 PROFESSIONAL SUMMARY

Senior Software Engineer and Solution Architect with over 25 years of experience designing and delivering enterprise-grade applications across banking, insurance, energy, telecommunications, and defence sectors. Deep expertise in Microsoft .NET technologies, Azure cloud, SQL Server, and BizTalk integration. Proven track record working as an independent contractor for top-tier financial institutions in Ireland (Central Bank of Ireland, BNP Paribas) and leading consulting firms across Europe. Certified Scrum Master and Microsoft Certified Professional. Comfortable working in distributed international teams. Hands-on with today's AI coding agents and harnesses (Claude Code, GitHub Copilot, OpenCode), tested on real projects, and AI-assisted development with Claude.

02 AI AGENTS & AI-ASSISTED DEVELOPMENT

- **Current agents & harnesses:** hands-on testing of the state of the art in AI coding agents and harnesses (Claude Code, GitHub Copilot and OpenCode) on real projects, across multiple LLM families.
- **AI-assisted development:** created and published an open-source taxonomy converter for EBA-published taxonomies (EbaDpm.Converter, github.com/phydelta/EbaDpm.Converter), developed entirely with Claude.
- **AI Document Classifier:** working system that categorises a corpus of 200,000 mixed documents, combining a custom-trained ML model with TypeSafe's Jev System One decision model.

03 CORE SKILLS

AI AGENTS & AI-ASSISTED DEVELOPMENT	Claude Code · GitHub Copilot · OpenCode · Agent harnesses · Multiple LLM families · System One decision models
MICROSOFT STACK	.NET (Cross-platform: Windows, macOS, Linux, iOS, Android) · C# · ASP.NET Core · WPF · .NET MAUI · Blazor · SignalR · Entity Framework Core · WCF
CLOUD & DEVOPS	Microsoft Azure · Azure DevOps (Pipelines, Repos, Artifacts) · AWS · Jenkins · Bitbucket · SonarQube · CI/CD
DATABASES	SQL Server (incl. High Availability) · Azure SQL · Oracle · MySQL
AI / ML	Python · PyTorch · TensorFlow · NLP · Embeddings · Custom model training
GIS	ESRI ArcGIS development stack
METHODOLOGIES	Scrum (Certified Scrum Master) · Agile · Software Architecture & Design Patterns (IoC, Repository, DDD)

04 PROFESSIONAL EXPERIENCE

XBRL Developer (Contractor)

Sep 2020 – Present

Central Bank of Ireland · Dublin, Ireland

- Maintain and evolve the Central Bank's regulatory returns platform (ONR), which receives submissions from all financial institutions in Ireland, validates and transforms them, stores them, and forwards them to European authorities including the EBA and the ECB.
- Develop and support the platform's web applications and services in **.NET Framework 4.8 and .NET 6, tightly integrated with SQL Server 2022 (ETL pipelines, OLAP cubes and Data Warehouse).**
- Architect and automate build and release pipelines in Azure DevOps, reducing manual effort and deployment risk, and coordinate development, testing and deployment of new taxonomy versions (EBA, SRB, EIOPA, CBI) across the whole ecosystem.
- Lead the technical adoption of major regulatory changes (OIM-CSV / EBA 4.0 and DPM 2.0), proactively identifying technical risks and defining the team's migration strategy.
- Designed and built from scratch an internal Taxonomy Export Tool (later upgraded for DPM 2.0), closing a critical integration gap between Atome Matter (Regnology) and CBI's internal repository.
- **Created and published an open-source taxonomy converter for EBA-published taxonomies (EbaDpm.Converter https://github.com/phydelta/EbaDpm.Converter), developed entirely with AI-assisted development using Claude.**
- Act as a key technical reference for the team on high-complexity areas such as variance analysis, metadata deployment and database cube integration.
- Own production support for ONR's web apps, services, Data Warehouse, ETLs and cubes, ensuring regulatory reporting continuity.

Owner

Oct 2017 – Present

Phydelta Ltd · Dublin, Ireland

- **AI agents in practice:** Test the current generation of AI coding agents and harnesses (Claude Code, GitHub Copilot, OpenCode) on own projects, keeping up with the state of the art.
- Run independent projects to explore and validate emerging technologies alongside main contract work.
- AI Document Classifier: Built a lightweight document management system powered by a custom-trained machine learning model (NLP + embeddings) to automatically categorise and organise documents.
- Maintenance Report App (Web & Mobile): Developed a full-stack application (API + responsive web + mobile) for IT equipment repair tracking, allowing field technicians to create, update, and close tickets in real time.
- Continuously experiment with AI/ML and modern full-stack architectures, keeping skills at the leading edge.
- Run independent R&D projects alongside my main contract work to stay current with emerging technologies, including **.NET 10**, **.NET MAUI** for mobile, multiple **LLM families** and agent harnesses, and **System One decision models**.
- **AI Document Classifier:** Built a lightweight document management system that automatically categorises and organises documents, combining a custom-trained ML model (NLP + embeddings) with TypeSafe's **Jev** System One decision model for fast, typed, probabilistic classification. Used to classify a corpus of **200,000 documents** of mixed types.
- **Maintenance Report App (Web & Mobile):** Developed a full-stack application (API, responsive web and mobile app) for IT equipment repair tracking, letting field technicians create, update and close tickets in real time.
- Continuously experiment with AI/ML and modern full-stack architectures, applying what I learn to my day-to-day engineering work.
- Projects are private; source code and live demos available on request.

Senior Software Developer (Contractor)

Apr 2019 – Sep 2020

BNP Paribas · Dublin, Ireland

- Delivered new features for the ULTRA Web platform — a global system for managing purchase invoices, sales invoices, purchase orders, and payments.

- Worked within a distributed team across Dublin, Madrid, and Paris.
- Tech stack: ASP.NET / .NET 4.6.1, Entity Framework, Jenkins, Bitbucket, SonarQube (CI/CD).

Senior Software Developer (Contractor)

Mar 2018 – Apr 2019

Spencer Stuart · Dublin, Ireland

- Extended the QUEST Recruitment Management Platform — a multi-module web and mobile product used globally.
- Implemented new features across web and mobile (iOS/Android) surfaces, supporting hundreds of automated builds and deployments daily.
- Tech stack: ASP.NET / .NET 4.6.1, AngularJS, Angular 4, Knockout, NHibernate, Xamarin.

Senior Software Developer (Contractor)

Oct 2017 – Mar 2018

Central Bank of Ireland · Dublin, Ireland

- Added new XBRL Return Types and created the validation process for the SRB Liability Data Report (LDT), integrated with the existing SharePoint portal and BI systems.
- Tech stack: ASP.NET / .NET 4.6.1, Fujitsu XBRL Libraries, SRB Taxonomies, SharePoint 2010, Nintex Workflows.

Senior Software Engineer

Jan 2017 – Oct 2017

Deloitte · Dublin, Ireland

- Designed and developed a decoupled messaging solution for the Irish Department of Social Protection's MyWelfare platform, integrating with BizTalk for asynchronous write operations.
- Produced detailed technical specifications, flowcharts, and architectural documentation.
- Tech stack: BizTalk Server 2013 (ESB, High Availability), SQL Server, ASP.NET MVC, SignalR, AngularJS.

Senior BizTalk Consultant

Aug 2015 – Dec 2016

Sogeti · Luxembourg

- Lead consultant for the NSPA (NATO Support and Procurement Agency) project: designed and developed the BizTalk infrastructure to integrate logistics delivery systems across multiple NATO nations, including end-to-end package tracking via RFID.
- Tech stack: BizTalk Server 2013 (ESB, High Availability), C# 4.5, SQL Server 2014 (High Availability), RFID.

.NET Software Architect

Nov 2006 – Jun 2015

Indra · Spain

- Principal .NET Architect across a broad portfolio of enterprise projects in banking, energy, telecommunications, tourism, and real estate — ranging from 2-month engagements to 3-year programmes.
- Designed and led development of the internal IDynamic RAD framework (Visual Studio integration, IoC, Repository patterns), personally responsible for ~80% of its design and implementation.
- Delivered internal .NET training as an occasional instructor across the organisation.

Selected projects

- **Securitas Direct (€3M, 25 people)** — *WPF 4, Genesys — All-in-One Contact Centre workspace application.*
- **Aqualia (€2M, 40 people)** — *Architect — .NET solution for automated smart water meter reading across 4 radio technologies.*
- **Endesa** — *Real-time low-voltage grid management app with distributed Oracle/GIS/.NET architecture.*
- **Banco de España (€400K)** — *Credit risk rating application integrated with CNMV via BizTalk.*
- **Mercedes-Benz** — *Cross-browser Silverlight 5 / WCF financial calculator for dealerships.*
- **Orizonia (€2M, 14 people)** — *B2B wholesale web platform for vacation packages, flights, and hotels.*
- **Microsoft** — *WPF 3.0 real-time 3D demo for the 32nd America's Cup with live GPS and video streaming.*

IT Solution Architect

Feb 2006 – Nov 2006

Altran Consulting · Spain

- Established a Microsoft technology centre of excellence (.NET, SQL Server, SharePoint, BizTalk) to deliver high-level support, development, and training services.

Software Engineer

Jun 2005 – Feb 2006

Renacimiento · Spain

- Designed and developed a .NET / SQL Server 2000 web application for Universidad Complutense de Madrid to manage teacher dedication commitments and student schedules.

.NET Trainer (Freelance)

Jan 2005 – Jun 2005

Phydelta Soft · Spain

- Delivered corporate training in C#, VB.NET, ADO.NET, COM+, Web Services, ASP.NET, and SQL Server 2000.

OSS Engineer

Mar 2002 – Jun 2005

Red Eléctrica de Telecomunicaciones · Spain

- Designed an OSS (Operational Support System) for network element activation using HP OpenView, HP OpenView Service Activator, Remedy, and Infovista.
- Worked with Cisco routing, TCP/IP, ATM, ADSL, MPLS, L2TP, and PPP. Activation server developed in Java and .NET.

Senior Developer

Jan 2001 – Mar 2002

RGA Insurance · Spain

- Developed life insurance application processing approximately 4 million contracts. Tech: VB6, COM+, SQL Server 2000 Cluster.

Junior Programmer

Jan 2000 – Jan 2001

NT Consulting · Spain

- Developed a traffic fine management application for a city council (Visual Basic, SQL Server, Oracle, Informix) and a companion Pocket PC app in Embedded VB.

05 EDUCATION

- **Bachelor's degree in Electronic Engineering** (Universidad de Granada)
- **6.86x: Machine Learning with Python-From Linear Models to Deep Learning** (MITx)

06 CERTIFICATIONS

- **Microsoft Certified Professional** (ID: 3385039)
- **Certified Scrum Master** (ID: 000426915)

07 LANGUAGES

- **Spanish** — Native
- **English** — Professional working proficiency (B1–B2 CEFR)