Contactar

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www.linkedin.com/in/robertogomezespinosamartin (LinkedIn)
www.hi-iberia.es/artificial-intelligence (Company)

Aptitudes principales

• Systems Architecture • Systems Integration • Software Engineering • Distributed Systems • Cloud Computing (AWS) • Data Platforms • Technology Strategy • Product Development • Technical Leadership

• Artificial Intelligence (Applied) • Machine Learning • Deep Learning • Reinforcement Learning • Computer Vision • Data Analytics • Systems Integration • Cloud Architectures (AWS) • Technology Strategy • Technical Leadership

Strategic & Leadership • Artificial Intelligence Strategy • Technical Leadership & Team Management • Systems Architecture for AI • EU Defence & Industrial R&D Programs • AI Governance & Explainability

Certifications

Big Data Specialization

Machine Learning

Machine Learning Engineering for Production (MLOps)

TensorFlow: Advanced Techniques

Machine Learning Specialization

Roberto G.E. Martín

Director of Artificial Intelligence at HI-IBERIA | Applied AI for Defence, Digital Twins, Materials & Complex Systems
Madrid, Comunidad de Madrid, España

Extracto

I lead Artificial Intelligence at HI-IBERIA, where we design and deploy production-grade AI systems for complex, mission-critical environments.

My work sits at the intersection of AI, simulation, and engineering systems, addressing real operational problems in defence and security, naval and maritime platforms, industrial digital twins, advanced materials, and remote sensing.

I am responsible for defining and executing AI strategy across large multidisciplinary teams, ensuring that AI solutions are:
• Technically robust and auditable
• Integrated with real systems (C4I, industrial platforms, edge environments)
• Aligned with European defence, security, and industrial frameworks

Rather than building isolated demos, we focus on deployable AI platforms: multi-agent systems, AI-enhanced digital twins, simulation-driven decision support, and physics-informed models operating under real constraints.

My role combines technical leadership and systems-level decision-making, spanning architecture definition, technology selection, risk management, and alignment with end-user operational requirements. I work closely with domain experts, engineers, and public-sector stakeholders to ensure that AI capabilities are not only technically sound, but usable, explainable, and maintainable in real operational contexts.

Much of this work is delivered in close collaboration with defence primes, research centres, SMEs, and public administrations, through EU and national R&D initiatives (including EDF, Horizon Europe

and Pre-Commercial Procurement programmes), ensuring strong alignment with real public-sector operational needs.

Experiencia

HI Iberia Ingeniería y Proyectos

17 años

Director of Artificial Intelligence — HI-IBERIA Ingeniería y Proyectos S.L.
2018 - Present (8 años)
Madrid, Community of Madrid, Spain

Role overview

As Director of AI, I am responsible for AI strategy, technical leadership, and delivery across multiple domains, coordinating teams of ~20 engineers and interfacing directly with customers, partners, and public institutions.

Key responsibilities and impact
• Define and execute AI strategy for defence, naval systems, industrial platforms, and advanced materials
• Lead the development of production-ready AI platforms, from architecture to deployment
• Oversee multi-agent systems, simulation-driven AI, and decision-support solutions integrated with real operational systems
• Drive digital twin initiatives, combining physics-based models with machine learning for prediction, optimisation, and control
• Coordinate AI contributions across EDF, Horizon Europe, Digital Europe, CDTI and PCP projects
• Act as technical reference in engagements with defence primes, research institutions, and public administrations
• Ensure AI solutions meet requirements for robustness, explainability, security, and operational realism

1. BELLONA — AI for Defence Decision-Making
Multi-agent and generative AI platform for Courses of Action (COA) generation, integrated with C4I systems and LVC/wargaming environments.

2. SEDA / PLUTARCO — AI-Powered Geospatial Intelligence for Defence & Security

Operational AI platform for automated analysis of satellite imagery (optical & SAR), maritime and terrestrial surveillance, and law enforcement use cases, including edge deployment.

3. Digital Twins for Naval & Industrial Systems
Predictive maintenance, anomaly detection, and optimisation for ships, offshore wind, and energy infrastructure.

4. AI for Advanced Materials & Energy
AI-driven materials discovery, corrosion modelling, and sustainable energy materials (Smart Material, KIMIKO, CHAINERGY).

5. Emerging Projects
Industrial data spaces and supply-chain optimisation (BUHO), physics-informed AI for energy and fusion systems (DONES, HEGAPS).

Head of Artificial Intelligence
2016 - 2018 (2 años)
Madrid y alrededores, España

At hi-iberia.es (HIB) I research emerging technologies and tech strategy consulting for companies. Currently, my department is developing new AI technologies like Deep Learning & Reinforcement Learning in the areas of Remote Sensing (Satellites), Security, Healthcare, Naval Industry, Energy and Retail.

Skills: Research, Innovation, Cloud-Mobile Systems Design, Automation, Deep Learning, Reinforcement Learning, Tech Strategic Consulting,

Artificial Intelligence Specializations:
+Deep Reinforcement Learning Nanodegree by Udacity
+Deep Learning Specialization by deeplearning.ai
+Self Driving Car Engineer by Udacity
+Deep Learning NanoDegree by Udacity
+Professional Program Certificate in Data Science by Microsoft
+Machine Learning Specialization by the U. of Washington
+Big Data Specialization by U. of California San Diego
+Machine Learning by Stanford Online U.

Audited AI Courses:
+CS294-112 - Deep Reinforcement Learning by UC Berkeley

+Deep Learning for Coders by fast.ai - SF U., 2018
+Reinforcement Learning By U. College London, David Silver
+CS231n - CNNs for Visual Recognition by Stanford U., Andrej Karpathy

Volunteer Work:
As an Udacity AI Alumni, I'm tutoring to students of PyTorch Scholarship Challenge.
https://goo.gl/GSrHro

CTO
2012 - 2016 (4 años)
Madrid y alrededores, España

“The best way to predict the future is to create it.” - Peter F. Drucker
I'm CTO of AI at www.hi-iberia.es. HIB is a tech company with much passion for making new ideas a reality. I research emerging technologies and defines technical strategies for the company. Currently, my department is developing and implementing new AI technologies like DL & DeepRL in the areas of Security, Education, Healthcare, Industry, Energy, and Retail.

"The true sign of intelligence is not knowledge but imagination." - Albert Einstein
http://www.hi-iberia.es/en/hiLineasInvestigacion.php

Demos Innovation Products:
https://goo.gl/B2cL2v

Senior IT Project Manager
2009 - 2012 (3 años)
Madrid y alrededores, España

http://www.hi-iberia.es/en/products.php

Telefonica
IT Project Consultant
2001 - 2009 (8 años)
Madrid y alrededores, España

I worked at Telefonica R&D, at that moment the first Spain R&D company. I developed software for several R&D projects: Wireless sensor networks, mobile networks, and new IoT systems.
Patent:
"Multi-interface telecommunications node".
Articles :

"Optical domain multipath implementation for a UMTS/HSDPA traffic loading platform". Presented at the COST (EUROPEAN COOPERATION IN THE FIELD OF SCIENTIFIC AND TECHNICAL RESEARCH) COST 2100 (Pervasive Mobile & Ambient Wireless Communications) action, at the 3rd plenary meeting held on 10-12 September 2007 in Duisburg (Germany) (http://www.cost2100.org/index.php?page=2007-2).
- Platform for UMTS/HSDPA traffic generation with multipath implementation in the optical domain", presented at Telecom R&D 2007 (29-31 October 2007, Valencia).
- MIMatrix, a MIMO radio channel physical emulator", Presented at the COST (EUROPEAN COOPERATION IN THE FIELD OF SCIENTIFIC AND TECHNICAL RESEARCH) action COST 273 (Towards Mobile Broadband Multimedia Networks), at the 12th plenary meeting held on 19-21 January 2005 in Bologna (Italy).

CSIC
Software Engineer Scholarship
1998 - 2001 (3 años)
Madrid y alrededores, España

During my Master Degree at UPM, I got a scholarship at CSIC, the primary center of R&D of Spain. I developed software for the automation of sensor data acquisition and processing systems.
http://www.csic.es

Educación

Universidad Politécnica de Madrid
Degree in Industrial Automation Engineering, Automation Engineer Technology/Technician · (1996 - 2001)

Databricks
Artificial Intelligence · (2023 - 2023)

Blockchain Revolution by INSEAD on Coursera
Blockchain · (2022 - 2023)

DeepLearning.ai
MLOps Specialization. Machine Learning Engineering for Production, Artificial Intelligence · (2021 - 2021)

DeepLearning.ai

Generative Adversarial Networks (GANs) Specialization, Artificial Intelligence · (2020 - 2021)