

Iván Díez de los Ríos

PH.D. CANDIDATE IN MICROELECTRONICS · TECH STRATEGY & PROJECT MANAGEMENT

Andalusia, Spain

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“Bridging cutting-edge deep tech research with strategic business value.”

Professional Summary

Strategic-minded Telecommunications Engineer and PhD Candidate with a track record of bridging the gap between cutting-edge R&D and practical engineering solutions. Certified in **Project Management** by Google, I specialize in navigating complex, high-stakes environments like the CSIC and European research consortia.

With a background that spans from professional music to bio-inspired microelectronics, I bring a unique blend of creative problem-solving and analytical rigor to **Stakeholder Management** and **Cross-functional Collaboration**. Bilingual in Spanish and French (born in Brussels) and fluent in English, my objective is to lead high-impact, challenge-oriented projects where technical mastery and human-centric management scale disruptive innovations into market-ready solutions.

Experience

IMSE-CNM-CSIC (Institute of Microelectronics of Seville)

Seville, Spain

PREDOCTORAL RESEARCHER & TECHNICAL CO-LEAD

Sep. 2021 - Present

- Co-managed technical planning and milestone tracking for multi-partner **European R&D projects** (project budgets up to €12.5M), acting as 2nd-in-command and liaising with international stakeholders.
- Implemented Agile-inspired workflows using GitLab (Issue tracking, Milestones, Merge Requests) to streamline multidisciplinary hardware/software development.
- Led “Reverse Mentoring” seminars (20+ hours) to upskill the entire team, including senior directors, on emerging, non-core technological frameworks.
- **Specialized in Neuromorphic Computing:** Key contributor in designing and developing a multi-core **memristor-CMOS analog neuromorphic processor** (64k synapses).

GRVC Robotics Laboratory (University of Seville)

Seville, Spain

RESEARCH ASSISTANT & HARDWARE SOLUTIONS ENGINEER

Mar. 2020 - Jul. 2021

- Developed and deployed robotic-arm automation solutions for the textile sector to accelerate the manufacturing of PPEs during the COVID-19 pandemic.
- Participated concurrently in 3 leading R&D robotics projects, bridging academic research with tangible, scalable hardware solutions for enterprise clients.
- Spearheaded the hardware design, prototyping, and validation lifecycle of an advanced mobility winged aerial robot (ornithopter) under tight deadlines.

Applus+ Norcontrol

Andalusia, Spain

TELECOMMUNICATIONS INFRASTRUCTURE & NETWORKS SUPERVISOR

Apr. 2019 - Nov. 2019

- Served as Broadband Quality Assurance (BQA) Lead for large-scale FTTH deployments across southern Spain, enforcing vendor compliance and operational excellence.
- Implemented and monitored rigorous quality control frameworks and service management processes for the deployment and radio-electric measurement of telephony antennas.

Skills

Management & Leadership

Project Management, Technology Advocacy, Cross-functional Leadership, Risk Mitigation

Soft Skills & Outreach

Complex Problem Solving, Customer-Oriented, Rapid Upskilling, Cross-Cultural Agility

Hardware & ASIC Design

Digital (Frontend/Backend) & Analog Design (Cadence Virtuoso)

Software & Systems Architecture

C/C++ (Embedded & GUI), Python, Linux Admin, Docker, CI/CD Pipelines

Languages

Spanish (Native), French (Fluent/Native), English (Advanced Professional)

Education

University of Seville

Seville, Spain

PH.D. CANDIDATE IN PHYSICAL SCIENCES AND TECHNOLOGIES (MICRO & NANOELECTRONICS)

2021 - Present

- Thesis: *Bio-Inspired Event-Driven Processing Systems* (Advised by Prof. Bernabé Linares-Barranco & Prof. Teresa Serrano-Gotarredona)

Coursera (Certified by Google)

Online

GOOGLE PROJECT MANAGEMENT PROFESSIONAL CERTIFICATE

2025

- Intensive 6-month practical program covering Waterfall and Agile methodologies, risk management, stakeholder communication, and strategic project execution.

University of Seville

Seville, Spain

M.SC. IN TELECOMMUNICATIONS ENGINEERING

2019 - 2021

- Comprehensive 120 ECTS full-time engineering program.
- Master's Thesis: *VLSI Back-end Design for Convolutional Neural Networks based on Stochastic Computing in 40 nm Technology* (Grade: 10/10 - Outstanding)

University of Seville

Seville, Spain

B.SC. IN TELECOMMUNICATION TECHNOLOGIES ENGINEERING (SPECIALIZATION: ELECTRONIC SYSTEMS)

Graduated 2019

- Bachelor's Thesis: *Combined Manometric and Electromyographic Recording Device* (Awarded *Matrícula de Honor* - Highest Honors)

Professional Engagements & Tech Advocacy

COIT (Official College of Telecommunications Engineers)

Spain

ACTIVE MEMBER - MICROELECTRONICS AND SEMICONDUCTORS WORKING GROUP

Present

- Contribute to roundtables and strategic discussions to guide and mentor telecommunication engineers entering the global semiconductor industry.
- Act as a Technical Advocate, promoting STEM initiatives and defining best practices in microelectronics on a national level.

IEEE (Institute of Electrical and Electronics Engineers)

Global

PROFESSIONAL MEMBER

Present

- Engaged in the world's largest technical professional organization, staying at the forefront of technological innovation and industry standards.

International R&D Stays & Global Collaboration

Research Stays & Ongoing Collaborations: Aarhus (Denmark), Milan & Genoa (Italy), and Tampere (Finland).

Impact: Proven ability to rapidly integrate, operate, and deliver technical milestones within multicultural and multidisciplinary, highly specialized R&D environments alongside international academic and enterprise partners.

Selected R&D Impact & Publications

Instead of a traditional academic publication log, my focus rests on tangible industry and scientific impact. During my career, I have authored and co-authored multiple high-impact, peer-reviewed papers on neuromorphic systems and event-driven computing. Furthermore, I have actively presented strategic findings at top-tier international conferences, translating abstract theoretical models into actionable hardware implementations. This robust output underscores a verified track record of Complex Problem Solving, combined with clear technical advocacy and communication for both highly specialized and non-technical stakeholders. If you'd like, you can find a complete list in my personal portfolio.