Carlos Fernández San Millán
Head of ICT & Acting CIO

📍 Milan, Italy
✉ carlos.fernandez.san.millan@gmail.com 📞 +39 351 650 0859

in LinkedIn 🌐 Professional Site ⦿ GitHub ⓘ ORCID

Technology Executive | Digital Transformation | Research Computing
15+ Years Leadership | €14MM Budget | 25+ FTEs

Executive Profile

Senior technology executive with 15+ years leading enterprise IT, research computing, cybersecurity, and digital transformation across international organizations. Proven track record in scaling datacenter/HPC services, modernizing ERP and enterprise platforms, strengthening governance and cyber resilience, and delivering measurable operational outcomes. Strong experience in matrixed, multidisciplinary environments with direct ownership of strategy, budget, vendors, and execution.

Core Competencies

IT Strategy & Digital Transformation   Cybersecurity & Risk Governance   Data Center & HPC Operations

Enterprise Architecture   Cloud & Hybrid Infrastructure   ERP Modernization (SAP S/4HANA)

IT Governance & Compliance   Vendor & Contract Management   Budget Planning (€14M)

Team Leadership (25+ FTEs)   Service Management (ITIL)   Program Management (PRINCE2)

Professional Experience

Head of ICT & Digitisation (Acting CIO)   Jan 2023 – Present
Human Technopole   Milan, Italy

- **Strategic ICT Leadership**: Define and govern the Institute's technology ecosystem, aligning ICT strategy with scientific excellence and operational efficiency; direct oversight of 25+ FTEs and 7 direct reports.

- **Digital Transformation**: Lead enterprise-wide digital initiatives that improved operational efficiency by **30%** and reduced manual processes by **45%**.

- **Research Technology**: Oversee data center and HPC services supporting genomic and data-intensive research; enable processing of **20PB+** with **99.99%** availability.

- **Cybersecurity Governance**: Established GDPR-aligned framework, reducing security incidents by **60%**.

- **Financial & Vendor Management**: Manage Opex/Capex budget and strategic vendor partnerships, delivering **25%** optimization.

- **Governance Roles**: Chairman, Internal ICT Advisory Board (IIAB); Member, Purchase Equipment Committee (PEC); Member, Large-Scale Data Committee.

- **ERP Program**: Directed migration from SAP ByDesign to SAP S/4HANA with enterprise ecosystem integration and data-driven operational improvements.

Chairman, IT Review Panel
European Council on Foreign Relations (ECFR)

Sep 2023
Berlin, Germany

- Chaired external IT department review panel and provided strategic recommendations for organizational technology governance and execution.

Data Center Infrastructure Manager
Human Technopole

May 2022 – Dec 2022
Milan, Italy

- Led high-performance infrastructure operations, backup/DR strategy, and continuity controls ensuring 99.99% availability.

- Defined standards and processes aligned with regulatory and institutional requirements.

- Managed network security, campus MAN, centralized scientific data storage, procurement planning, and supplier contracts.

- Coordinated infrastructure maintenance and facility evolution with cross-functional teams.

Storage and Virtualisation Engineer
Human Technopole

Jan 2021 – May 2022
Milan, Italy

- Managed central storage and virtualization platforms (PowerScale, NetApp, VMware, VDI), plus Linux services including Eduroam and RADIUS.

- Supported scientific computing demands in collaboration with research leadership and facility teams.

Systems & Virtualisation Engineer
European Molecular Biology Laboratory (EMBL)

Oct 2018 – Dec 2020
Heidelberg, Germany

- Managed VMware cluster (28 hosts, 650+ VMs) and international operations across EMBL sites.

- Administered NetApp environment (18 nodes, $\approx$9PB), including policy, QoS, quota, snapshots, and migration from 7-Mode to Data ONTAP.

- Planned and administered vSAN for GPU-driven VDI; managed backup with Veeam.

- Automated infrastructure workflows (Python), and managed services with Foreman/Puppet/Zabbix/Git.

Systems Engineer
European Molecular Biology Laboratory (EMBL)

Oct 2012 – Oct 2018
Heidelberg, Germany

- Delivered enterprise virtualization/storage operations and lifecycle upgrades (ESX/ESXi 4.1 to 6.7).

- Supported datacenter services, Linux administration, and enterprise applications (e.g., Alfresco, OwnCloud).

IT Manager
Digital Arts & Designers, S.L.

Jul 2010 – Sep 2012
Las Palmas de Gran Canaria, Spain

- Managed IT projects, Linux/server administration, network operations, infrastructure monitoring, and technical procurement/vendor relationships.

Freelance System Administrator
FIFA Refereeing Department

Jun 2010 – Jul 2010
Pretoria & Johannesburg, South Africa

- Operated Referee Channel e-learning and video-streaming infrastructure during the 2010 FIFA World Cup.

Earlier Career Positions
Various Organizations

1997 – 2010
Spain / USA

- Systems Administrator, Neuronal Software S.L. (2009–2010)

- Media Producer & System Administrator, University of Las Palmas de Gran Canaria (2008)

- IT Consultant (Freelance) (2005–2008)

- Technical Officer, Gran Canaria Espacio Digital (2005)

- Consultant, Gran Canaria Campus Junior Entrepreneurship (2004–2005)

- Project Manager & Developer, La Provincia – Diario de Las Palmas (2002)

- Laboratory Assistant, University of San Francisco (1997–1999)

Key Strategic Achievements

🏆 **Digital Transformation Leadership**

Led organization-wide digital modernization at Human Technopole, improving operational efficiency by **30%** and reducing manual processes by **45%**.

🛡 **Cybersecurity & Compliance Framework**

Implemented cybersecurity and data protection controls aligned with GDPR requirements, reducing security incidents by **60%**.

▤ **Research Computing Enablement**

Expanded and stabilized HPC/datacenter capabilities supporting advanced scientific workloads at **20PB+** scale with **99.99%** service levels.

📈 **Financial Optimization & Vendor Strategy**

Negotiated and structured multi-year vendor agreements, producing **40–60%** optimization in targeted contracts while improving support quality and operational continuity.

Education & Credentials

Technical Engineering in Computer Science   2000 – 2005
University of Las Palmas de Gran Canaria   Las Palmas, Spain

- Specialization: Systems Architecture and Infrastructure

- Activities: Gran Canaria Campus Junior Entrepreneurship

BSc Computer Science   1996 – 2000
University of San Francisco, School of Arts and Science   San Francisco, USA

- Activities: USF Men's Soccer Team

Summer Courses (Physics & Computer Architecture)   Summer 1998
University of California, Berkeley   Berkeley, USA

Professional Certifications

- ITIL 4 Foundation (Fast Lane, 2023)

- PRINCE2 Practitioner (Fast Lane, 2023)

- PRINCE2 Foundation (Fast Lane, 2023)

- VMware Certified Associate - Data Center Virtualization (VMware, 2013)

- Bacula Administrator I (Bacula Systems, 2021)

- Kubernetes Fundamentals & Operations (Amazic, 2019)

Selected Training

💻 Instructor-Led

- 2023 – ITILv4 Foundation (Fast Lane)

- 2023 – PRINCE2 Foundation & Practitioner (Fast Lane)

- 2021 – Bacula Admin I (Bacula Systems)

- 2019 – Kubernetes Fundamentals (Amazic)

- 2016 – VMware vRealize Automation ICM

- 2016 – VMware vSphere ICM + Optimize & Scale

- 2015 – IBM Tivoli Storage Manager 7.1.1

- 2014 – Clustered Data ONTAP 8.2 Admin

- 2013 – Data ONTAP 7-Mode Admin

💻 Online / Self-Paced

- VMware Skyline Support

- VMware Horizon 7

- Essential Container Concepts

- Containers & Orchestration (Beginner)

- Ansible Quick Start

- Puppet Quick Start

- DevOps Essentials

- Linux Command Line (Advanced)

- VIM & Git Quick Start

- NetApp ONTAP 7-Mode / 8.2 Modules

Technology Landscape

☁ Infrastructure & Cloud

- VMware vSphere/Horizon

- OpenNebula, oVirt

- Linux (RHEL, CentOS, Debian, Ubuntu, SuSE)

- Windows Server

- Hybrid Cloud, Docker, Kubernetes

🗄 Storage & Data

- NetApp, DELL PowerScale, DELL PowerStore, Unity

- vSAN, QNAP, Synology

- Veeam, TSM, Bacula

- HPC / Research Computing

- Data Governance

🛡 Security & Operations

- Cybersecurity Frameworks / GDPR

- IAM, Endpoint Security

- ITIL 4, PRINCE2

- LDAP, DHCP, DNS

- Zabbix, vROps, Foreman, Puppet, Ansible, Python

Selected Projects

Referee Channel   2010 – 2012
Digital Arts & Designers S.L.   International

- Built and operated server infrastructure for global referee e-learning and video-streaming platform.

- Supported usage across major competitions and institutions in Colombia, Spain, South Africa, Russia, and USA.

112 Accessible   2011
University of Las Palmas & Cátedra Telefónica   Las Palmas de Gran Canaria, Spain

- Produced and organized technical content for award-winning project improving accessibility to emergency services.

IESCampus   2008 – 2010
Neuronal Software S.L.   Las Palmas de Gran Canaria, Spain

- Supported infrastructure and platform operations for education portal serving secondary and baccalaureate curricula.

Prometeo   2007 – 2010
University of Las Palmas de Gran Canaria   Las Palmas de Gran Canaria, Spain

- Contributed to e-learning platform based on web and streaming technologies aligned with Bologna Process requirements.

Languages & Professional Activities

🅰️ Languages

🌐 ES	Spanish – Native
🌐 EN	English – Full Professional
🌐 IT	Italian – Professional
🌐 GL	Galician – Professional
🌐 PT	Portuguese – Conversational
🌐 DE	German – Very Basic

👥 Professional Activities

- Chairman, IT Review Panel – European Council on Foreign Relations (2023)

- Contributor – Cell Reports Methods (2022)

- Advisory – Technology strategy for research institutions

- Industry engagement – conferences and expert panels

References & Additional Information

🪪 References

- Dr. Rupert Lück, Head of IT, EMBL – lueck@embl.de

- Prof. Dr. Cayetano Guerra Artal, University of Las Palmas de Gran Canaria – cayetano.guerra@ulpgc.es

- Dr. Florian Jug, Head of Research of Multimodal AI Across Scales Center – florian.jug@fht.org

- Additional executive references available upon request

🪪 Other

- Driving License – B

- SSI Diver Level 3 (MID 312710)

- Willing to relocate for executive opportunities