

 Evry Courcouronnes, France
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EDUCATION

PhD in Computer Science

Université Paris-Saclay
2011 - 2015

Thesis: Context quality management models and algorithms and privacy respect (IoT).

Master in Computer Science & Networks

Institut Mines-Télécom Sud-Paris
2009 - 2011

Computer Science Engineer

Universidad Nueva Esparta (Vzla)
1995 - 2000

SKILLS

ARCHITECTURE

Microservices  DDD  System Design 
REST API  Clean Architecture 

DEVELOPMENT

Java (Spring Boot)  Python 
JavaScript/TypeScript  Node.js 

DATA & AI

PostgreSQL  MongoDB  Elasticsearch 
LLMs & AgentsAI  LangChain 

DEVOPS & CLOUD

Docker & Kubernetes 
CI/CD (GitLab/Jenkins)  ArgoCD 
GCP/OVH 

LANGUAGES

Spanish: Native
French: Fluent (C2)
English: Fluent (C1)

SAMER MACHARA MARQUEZ

TECHNICAL ARCHITECT & ENGINEERING MANAGER

Software Architect and Technical Lead (PhD) with over 25 years of experience in designing distributed systems and robust, secure microservices architectures. Expert in steering strategic projects in Agile environments, I combine strong technical expertise (Java, Cloud, IoT, AI) with proven team management skills. Passionate about large-scale data processing and operational excellence, I have a rich international background at the crossroads of technical direction, teaching, and R&D.

PROFESSIONAL EXPERIENCE

Technical Lead & Architect

Agence du Numérique en Santé (ANS)

Feb. 2023 – Present | Paris, France

- Technical Leadership:** Responsible for the architectural vision for critical national projects (FINESS, RIPSC). Definition and application of microservices and DDD architecture rules.
- Coordination & Management:** Steering internal stakeholders (Product Owners, Project Managers) and coordinating external vendors and subcontractors to ensure strategic alignment and deadlines.
- Standardization:** Creating a best practices encyclopedia to standardize deliverables and capitalize on feedback (Knowledge Management).
- Security & Compliance:** Leading security compliance work (EBIOS, ANS homologation) guaranteeing the protection of sensitive data.

Project Manager - Scrum Master Plug and Plate (Freelance)

Oct. 2021 – Dec. 2022 | Paris Region

- Agile Steering:** Complete management of the development cycle (SDLC) of web solutions for the restaurant industry using Scrum methodology.
- Product Strategy:** Scoping business needs, writing User Stories, and prioritizing the Backlog to maximize business value.
- Team Coaching:** Mentoring development teams, facilitating rituals, and organizing acceptance testing (UAT).

IT Production Director / Tech Lead

Testamento (Contrat Facil)

Oct. 2017 – Jan. 2020 | Gentilly, France

- Transformation:** Migration towards microservices architecture and industrialization (CI/CD).
- Management:** Implementing Scrum and supervising external service providers.

PUBLICATIONS & RESEARCH

"A comparative analysis of context-management approaches for the Internet of Things"

The International Arab Journal of Information Technology (2017)

"Trust-based Context Contract Models for the Internet of Things"

International Symposium on Ubiquitous Intelligence and Autonomic Systems (2013)

"INCOME — Multi-scale Context Management for the Internet of Things"

International Joint Conference on Ambient Intelligence (2012)

Cloud Engineer & R&D Researcher IMT Sud-Paris / CNRS

Oct. 2011 – Sept. 2017 | Evry, France

- **Cloud (2016-17):** Cloud infrastructure consolidation, datacenter relocation, documentation centralization.
- **PhD R&D (2011-14):** Designing IoT algorithms, data quality management (QoC) & Privacy. Java/Eclipse.

Software Development Engineer

TELECOM SudParis

Mar. 2011 – Sept. 2011 | France

- **European Project "CompatibleOne":** Development of the "pyOrbac" application (Python) and "xOrbac DSL" (XML/XSD) for unified security policy management.

INTERNATIONAL EXPERIENCE (VENEZUELA)

Project Manager

Tagua Center

Nov. 2004 – Sept. 2009 | Venezuela

- **Coordination:** Management of an internal team and service providers for administrative and reservation systems.
- **Full Cycle:** Needs analysis, specifications, planning, budgeting, and deployment.
- **Stack:** MS Project, Visual Basic, MySQL, PHP, HTML.

Solutions Analyst Designer

Zurich Insurance Company

Dec. 2000 – Nov. 2004 | Venezuela

- **AS400 / SAP Interfaces:** Design and development of the flow interface, deployed in several Latin American subsidiaries.
- **Bancassurance:** Technical project planning and steering, writing specifications, and coordinating external teams based in the Brazilian subsidiary.
- **DB Admin (SQL Server):** Administration, performance optimization, security management, and backups.

Early Experience

Univ. Nueva Esparta & Manapro

1998 – 2001 | Venezuela

- **Professor (2000-01):** Teaching "Software Development" for engineers (3rd year).
- **Analyst Developer (1998-00):** Dev VB/DB applications for banks and insurance. Quality audit.