## **Rudy MARINGER**

# Empowering Industry X.0: Architecting and Accelerating Digital Transformation

Last	update:	March	27.	2023
Lusi	upuutc.	With	۷,	2020

Up-to-date version of CV is available at

https://RudyMaringer.github.io/cv-resume-public

Residence	Bordeaux - FRANCE
LinkedIn	in Rudy MARINGER
Email	<u>rudy.maringer@widy-conseils.com</u>

#### Who I am

With over 23 years of experience, I specialize in designing and implementing digital transformation solutions for manufacturing industries. My expertise lies in architecting interconnected systems and leveraging OPC UA technology to standardize shopfloor communication layers, paving the way for Digital Twin integration. I have played a pivotal role in bridging the IT/OT gap and possess extensive knowledge in cloud technologies. Fluent in both French and English, I am well-equipped to drive successful projects on a global scale.

As an accomplished professional with a strong coding background, I am highly proficient in various programming languages and development practices. This technical expertise allows me to play an active role in the development process, ensuring that projects are executed to the highest standards. My ability to code is a critical asset, as it enables me to contribute directly to the creation of innovative solutions and adapt to the ever-evolving technological landscape.

People have praised me as an exceptional professional, saying that they would like to "clone" me, in the most respectful way, due to my unique combination of expertise, intelligence, and exceptional client management skills. My technical leadership has been instrumental in building trust with clients across various levels, from business and IT to C-level executives and technical experts. Additionally, I possess strong collaboration skills, which enable me to bring together diverse teams to tackle complex issues, ranging from enterprise architecture to intricate technical challenges. My well-rounded capabilities make me an invaluable asset to any project, ensuring successful outcomes and strong client relationships.



## **Professional Experience**

12/2022 - 02/2023

# Accenture Industry X - IS&S Delivery Senior Manager FAURECIA - Lexicon Assessment and Roadmap Development

Subject Matter Expert (France)

The project consists of four main steps: (1) evaluating the current lexicon, which includes technologies, IT, processes, and governance, (2) analyzing potential technical solutions and their respective architectures, (3) creating a strategic lexicon roadmap, and (4) developing a macro backlog for implementation.

- 1. Lexicon as-is assessment: This step involves examining the current state of the lexicon, including the technologies, IT infrastructure, processes, and governance mechanisms in place. The aim is to identify strengths, weaknesses, and areas for improvement.
- 2. Assess technical solutions and corresponding architecture: Next, potential technical solutions and their associated architectures are evaluated to determine their feasibility, effectiveness, and alignment with the organization's objectives. This will help in identifying the best-suited solution to address the identified gaps and weaknesses.

- 3. Define lexicon roadmap: Based on the assessments, a strategic lexicon roadmap is developed, outlining the short-term and long-term goals for improving the lexicon. This includes identifying key milestones, timelines, and resources required to achieve the desired outcomes
- 4. Build macro backlog: Lastly, a macro backlog is created to prioritize and manage the implementation of the lexicon roadmap. The backlog includes tasks, action items, and responsibilities necessary to execute the roadmap, ensuring continuous progress and improvement.

OPC UA Kepware SAP ME/MII SAP PCo Azure Cosmos DB SQL Server Azure IoT Edge Azure Functions VueJS .NET NodeJS

Typescript

08/2022 - 12/2022

## Accenture Industry X - IS&S Delivery Manager FAURECIA - Industrial Digital Platform on Azure

Technical Lead (France)

Develop a Minimum Viable Product (MVP) utilizing the full Azure platform to enhance and expedite the delivery of business use cases, focusing on real-time operational KPIs, machine data, and ontology representation in Azure Digital Twins.

#### Key Responsibilities:

- Design and implement the industrial digital platform using Azure services, ensuring seamless integration, high performance, and scalability to support business needs.
- Develop real-time operational KPIs, enabling businesses to monitor performance, identify inefficiencies, and make data-driven decisions for process optimization.
- Implement real-time machine data collection and analysis to provide valuable insights into equipment health, performance, and maintenance requirements, ultimately reducing downtime and improving productivity.
- Utilize Azure Digital Twins to create an ontology representation of the industrial environment, enabling a more accurate and detailed understanding of relationships between assets and processes.
- Collaborate with cross-functional teams, including business stakeholders, data scientists, and developers, to ensure alignment of the
  platform's functionality with business objectives and use cases.
- Continuously monitor, optimize, and update the platform to ensure it remains up-to-date with the latest Azure features, security best practices, and industry standards.
- Oversee the development and execution of test plans, ensuring the platform meets performance, usability, and reliability requirements.
- Provide technical leadership and guidance, mentoring team members and fostering a culture of innovation, collaboration, and continuous improvement.

Azure Digital Twin Azure Data Explorer Azure IoT Edge Azure Functions Terraform SAP ME/MII

06/2022 - 08/2022

#### Accenture Industry X - IS&S Delivery Manager

### FAURECIA - IIoT Solution Benchmarking - Business Case for Choosing the Future Industrial Platform

Technical Lead (France)

Conduct a comprehensive benchmarking analysis of four leading IIoT solutions, namely Full Azure, Cognite leveraging Azure, PTC ThingWorx, and Palantir, to determine the best fit for the future industrial platform.

#### Key Steps:

- Define evaluation criteria: Establish key factors for comparing IIoT solutions, including functionality, scalability, integration, ease of
  use, security, and cost-effectiveness.
- · Review and assess four key solutions:

- Full Azure: Examine Azure's IIoT offerings and capabilities.
- o Cognite leveraging Azure: Analyze the hybrid approach using Cognite Data Fusion with Azure.
- PTC ThingWorx: Evaluate the IoT capabilities and integration of the PTC ThingWorx platform.
- Palantir: Investigate Palantir's data integration, analytics, and visualization features for industrial applications.
- Collect and analyze customer feedback: Obtain insights from existing users regarding their experiences, challenges, and satisfaction levels with each platform.
- Conduct hands-on testing and proof-of-concept: Implement trial versions of each solution to evaluate performance, ease of use, and
  potential challenges.
- Compare, rank, and recommend the best solution: Based on criteria, feedback, and testing, determine the most suitable solution for the organization's needs and goals.
- Develop and present a detailed business case: Outline the benefits, costs, risks, ROI, and implementation timeline for each solution, and present the analysis to stakeholders.
- Collaborate with stakeholders for decision-making and implementation planning: Work together to select the best IIoT solution and develop a roadmap for implementation, including milestones, timelines, and resources.

Azure Platform	Cognite	PTC ThingWorx	Palantir Foundry
----------------	---------	---------------	------------------

03/2022 - 06/2022

#### Accenture Industry X - IS&S Delivery Manager

# FAURECIA - Industrial Digital Platform - SQL Server Change Data Capture (CDC)

Technical Lead (France)

Conduct a benchmarking analysis of SQL Server Change Data Capture (CDC) capabilities, focusing on six different solutions that enable real-time, event-driven data processing. Deliver a business case to help choose the best solution for implementing real-time capabilities during an MVP phase.

#### Responsibilities:

- · Define evaluation criteria for SQL Server CDC solutions.
- · Identify and review six potential solutions.
- Collect and analyze customer feedback.
- Conduct hands-on testing during MVP phase.
- · Compare, rank, and recommend best-suited solution.
- · Develop and present a detailed business case.
- Plan and oversee the chosen solution's implementation.



10/2021 - 02/2022

# Accenture Industry X - IS&S Delivery Manager FAURECIA - Industrial Digital Platform on Cognite Data Fusion

Technical Lead (France)

Develop a Proof-of-Concept (PoC) using Cognite Data Fusion to enhance and expedite the delivery of business use cases, focusing on real-time operational KPIs, machine data, and ontology representation in a knowledge graph.

#### Key Responsibilities:

- Design and implement the industrial digital platform using Cognite Data Fusion, ensuring seamless integration, high performance, and scalability to support business needs.
- Develop real-time operational KPIs, enabling businesses to monitor performance, identify inefficiencies, and make data-driven decisions for process optimization.

- Implement real-time machine data collection and analysis to provide valuable insights into equipment health, performance, and maintenance requirements, ultimately reducing downtime and improving productivity.
- Utilize a knowledge graph to create an ontology representation of the industrial environment, enabling a more accurate and detailed understanding of relationships between assets and processes.
- Collaborate with cross-functional teams, including business stakeholders, data scientists, and developers, to ensure alignment of the
  platform's functionality with business objectives and use cases.
- Continuously monitor, optimize, and update the platform to ensure it remains up-to-date with the latest Cognite Data Fusion features, security best practices, and industry standards.
- Oversee the development and execution of test plans, ensuring the platform meets performance, usability, and reliability requirements.
- Provide technical leadership and guidance, mentoring team members and fostering a culture of innovation, collaboration, and continuous improvement.

Cognite Data Fusion	Python	Transact SQL	Grafana	PowerBI	Azure Power Platform
---------------------	--------	--------------	---------	---------	----------------------

01/2020 - 09/2021

#### Accenture Industry X - IS&S Delivery Manager

# VERALLIA - DELMIA APRISO Manufacturing Execution System (MES) Integration

Architect Lead

Led the successful replacement of a 25-year-old legacy Manufacturing Execution System (MES) with a modern, scalable solution, ensuring uninterrupted production operations during the transition.

- Successfully integrated the APRISO MES into the existing industrial environment, covering design, development, and implementation phases.
- Collaborated with stakeholders to define requirements, considering business needs, objectives, and existing infrastructure.
- Created a detailed design, including system architecture, data flows, communication protocols, and interfaces with ERP, PLCs, and SCADA systems
- Developed customizations, extensions, and integrations for seamless connectivity between the APRISO MES system and existing systems, adhering to best practices and industry standards.
- Executed comprehensive test plans to ensure the reliability, performance, and functionality of the APRISO MES integration.
- · Oversaw deployment, including hardware and software configuration, data migration, and system performance validation.
- · Provided training and support to end-users, empowering them to effectively utilize the APRISO MES system for improved operations.
- · Monitored system performance, identified optimization opportunities, and implemented enhancements to maximize value.
- · Developed and maintained thorough documentation for ongoing maintenance and support.

#### **VERALLIA - OPC UA Data Models and Server Customization**

Technical Lead & Subject Matter Expert (France / Italia)

Implemented standardized shop floor equipment and processes to enable scaling across multiple plants and prepared the customer for the adoption of new APRISO MES systems, while also introducing them to the concept of Digital Twins.

- Defined tailored OPC UA data models and server customizations to accelerate MES integration and enhance system interoperability.
- · Connected previously incompatible machines, enabling seamless data exchange across the manufacturing ecosystem.
- Conducted testing and validation to ensure optimal performance, functionality, and reliability of the implemented OPC UA data models and servers.
- Managed end-to-end implementation, seamlessly integrating the OPC UA system into the client's manufacturing environment, improving operational efficiency.
- Provided training, support, and comprehensive documentation to facilitate ongoing maintenance and maximize the system's longterm value.

### Innovation - Technical Expert - SILVEO

# Chassis Break International & AML Systems - MES Architecture & Implementation

Architect Lead (France / Polland)

Collaborated with customers to design technical architecture in DELMIA APRISO or SAP ME/MII context, ensuring tailored solutions to meet their specific needs.

- Oversaw architecture design to stress test, validating system performance, reliability, and scalability under varying conditions.
- Leveraged expertise in both DELMIA APRISO and SAP ME/MII to provide comprehensive guidance and support throughout the design process.
- · Ensured seamless integration of technical architecture with existing systems, maximizing efficiency and operational performance.
- Continuously monitored and optimized architecture, incorporating emerging technologies and best practices to deliver cutting-edge solutions.

#### SOGEFI - SAP and Azure Logic Apps Integration

Technical Lead (France)

Developed custom interfaces using Azure Logic Apps and Node.js to connect on-premise SAP with external applications, enabling secure and scalable data exchange and collaboration.

- Developed interfaces between on-premise SAP and external applications using Azure Logic Apps and Node.js, enabling seamless
  connectivity and data exchange.
- Enabled customers to open dedicated SAP transactions for external users, enhancing collaboration and information sharing with partners and clients.
- Leveraged expertise in Azure Logic Apps and Node.js to create custom functions and integrations tailored to the clients' specific needs
- · Ensured robust, secure, and scalable solutions, compliant with industry standards and best practices.
- · Provided ongoing support, optimization, and maintenance to maximize the value and performance of the integrations.

#### **RENAULT - APRISO MES Interface Design - REST API**

Technical Lead (France)

Designed, developed and maintained interfaces to expose APRISO Manufacturing Execution System (MES) to external applications, ensuring seamless data exchange, and collaboration with third-party systems, while providing ongoing support and optimization to maximize performance.

- Designed interfaces to expose APRISO Manufacturing Execution System (MES) to external applications, facilitating seamless data exchange and integration with third-party systems.
- Leveraged in-depth knowledge of APRISO MES and industry best practices to create robust, secure, and scalable interface solutions.
- Collaborated with clients and stakeholders to define requirements and ensure alignment with business objectives.
- Oversaw end-to-end interface development, from design to implementation, ensuring timely delivery and smooth integration.
- · Provided ongoing support, optimization, and maintenance to maximize the value and performance of the interfaces.

#### Internal Asset - Configurable OPC UA Simulator Development

Sponsor & Technical Lead (France)

Designed and developed a fully customizable OPC UA simulator, enabling efficient testing and validation without the need for physical machine connections, resulting in streamlined architecture performance validation.

- Developed a fully configurable OPC UA simulator to streamline testing and validation without the need for physical machine connections.
- Successfully decreased testing phase duration, enabling clients to validate architecture performance more efficiently.
- Leveraged expertise in OPC UA to create a customizable simulator that can adapt to various testing scenarios and requirements.
- Worked closely with clients to understand their needs, ensuring the simulator was tailored to their specific use cases.

· Provided ongoing support, maintenance, and optimization to maximize the value and performance of the OPC UA simulator.

#### **Internal Asset - Core Monitoring Solution Development**

Sponsor & Technical Lead (France)

Designed and delivered a core monitoring solution with fully configurable performance dashboard and alert management to decrease deployment time for rollouts and provide real-time production monitoring, tailored to clients' specific needs, with ongoing support and optimization.

- Delivered a core monitoring solution to significantly decrease deployment time for rollouts, providing clients with faster access to performance insights.
- Enabled customers to benefit from a fully configurable performance dashboard that includes alert management for real-time production monitoring.
- · Collaborated with clients to understand their monitoring needs, tailoring the solution to their specific requirements.
- · Streamlined the deployment process, ensuring efficient and smooth rollouts for a diverse range of clients and use cases.
- · Provided ongoing support, maintenance, and optimization to maximize the value and performance of the core monitoring solution.

#### Chassis Break International - Reprocessing Solution for SAP MES

Sponsor & Technical Lead (France)

Designed and implemented a customizable SAP MES reprocessing solution for efficient handling of failed messages, ensuring seamless data exchange, enhanced reporting capabilities, and tailored client support.

- Developed a reprocessing solution for SAP MES to handle failed messages from SAP Plant Connectivity during high application load.
- Successfully enabled clients to reprocess all failed messages, ensuring full visibility and seamless data exchange.
- Provided customers with a fully configurable GUI for reporting and analysis, empowering them to make informed decisions based on transaction data.
- · Collaborated with clients to understand their reprocessing needs and requirements, tailoring the solution accordingly.
- · Offered ongoing support, maintenance, and optimization to maximize the value and performance of the reprocessing solution.

#### SAP - Machine Connection and 3D Real-Time Visualization

Technical Lead (France)

Designed and delivered a 3D visualization and machine connection solution in collaboration with SAP as a partner, providing real-time representation of industrial machinery and showcased it at Smart Industry @Lyon, while offering ongoing support and maintenance to maximize its value and performance.

- Collaborated with SAP as a partner to design a production andon, including real-time representation of a Staubli robot machine.
- · Successfully showcased the 3D visualization and machine connection solution on the SAP stand at Smart Industry @Lyon.
- Worked closely with SAP and clients to understand their visualization and connectivity needs, ensuring a tailored and effective solution.
- Leveraged expertise in machine connectivity and 3D visualization to create a seamless, real-time representation of industrial machinery.
- Provided ongoing support, maintenance, and optimization to maximize the value and performance of the 3D visualization and machine connection solution.

# SAP & Productoo - PHP/MSSQL Migration to Cloud Foundry SAP HANA

Technical Lead (France)

Led the successful migration of an eKanban application from a Windows Server and MSSQL backend to the SAP Cloud Platform on Cloud Foundry with SAP HANA, enabling the partner to potentially offer it as a fully pre-packaged solution in the SAP Marketplace.

- Successfully migrated an eKanban application from a PHP application hosted on Windows Server, using MSSQL Server as backend, to SAP Cloud Platform hosted on Cloud Foundry with SAP HANA database as backend.
- Enabled partner to consider exposing their application in the SAP Marketplace and potentially offering it as a fully pre-packaged solution in a SaaS context.

- Collaborated with SAP and partner to understand their migration needs and requirements, ensuring a smooth transition to the new hosting environment.
- Leveraged expertise in Cloud Foundry, SAP HANA, and application migration to minimize downtime and maximize performance of the migrated eKanban application.
- Provided ongoing support, maintenance, and optimization to maximize the value and performance of the application on the SAP Cloud Platform.

```
SAP ME/MII (APRISO OPC UA AWS AZURE IOT (InfluxDB) ElasticSearch (NodeJS) (Typescript (Python) (Grafana (PowerBI SQL Server) (PHP) (SAP HANA (Apigee)
```

01/2010 - 01/2018

## FREELANCE - Cloud Solution & SQL Server consultant ESSILOR - SQL Server Consultant

SQL Server Team Manager (France / Thailland / USA)

As a DBA team manager, led the management of SQL and MySQL databases, optimized performance, and ensured high availability and disaster recovery. Developed microservices to streamline database management, conducted workshops, and implemented a TIG stack for proactive alerting and monitoring.

- Led a team of database administrators (DBAs) responsible for managing SQL and MySQL databases, ensuring high availability, disaster recovery, and optimal performance.
- Designed architecture for high availability and disaster recovery capabilities, minimizing downtime and data loss risks.
- Conducted performance auditing, tuning, capacity planning, and optimization to maximize database efficiency and minimize costs
  related to licensing and infrastructure.
- Developed microservices to enrich and serve our catalog of SQL services for self-service purposes and automation, streamlining database management processes.
- Conducted workshops for support and developer teams to enhance their understanding of database management best practices and strategies.
- Implemented a TIG stack (Telegraf, InfluxDB, Grafana) for alerting and monitoring purposes, enabling proactive detection and resolution of database issues.

#### WCO - Consulting

Freelance - External Services Portfolio(France)

As a freelance consultant, I undertook numerous external projects aimed at delivering quick wins and high value for clients. Leveraging my expertise in various domains, I collaborated closely with stakeholders to develop tailored solutions that met their specific needs, while ensuring optimal performance and efficiency.

#### WCO

- · Developed a SaaS service to help customers quickly deploy virtual machines with integrated management features.
- Designed and implemented cloud architecture and migration strategies for clients, ensuring a smooth transition and optimized infrastructure.
- Conducted audits and tuning of SQL Server solutions, improving database performance and efficiency.
- Performed infrastructure audits and cost optimization, identifying opportunities for cost savings and resource allocation improvements
- · Served as a partner and reseller of SQL Sentry solutions, offering clients access to cutting-edge database management tools.

#### **ESSILOR**

- Developed a multi-dialect ETL Node.js solution to broadcast data across different database types and exposed a REST API for job
- Facilitated knowledge transfer to Indian team, ensuring they were well-equipped to maintain and support the ETL solution.

#### LOOKUP

• Developed Java web services for customer and campaign management, streamlining business processes and improving efficiency.

 Conducted an infrastructure audit (P2V), assessing the current state of resources and identifying opportunities for virtualization and optimization.

XXX

2007 - 2010

#### KENTRON - IT Consultant

#### ESSILOR - SQL Server consultant & Production engineer

SQL Server Consultant & Production engineer (France / Thailland / USA)

Spearheaded server management, database administration, and system optimization while driving server migration and developing productivity-enhancing tools for improved operational efficiency.

- · Managed and monitored HP-UX and Redhat servers, ensuring their optimal performance, security, and reliability.
- Administered and monitored SQL Server databases, addressing any issues promptly to minimize downtime and maintain system
  efficiency.
- Designed SQL maintenance plan architecture, implementing best practices to improve database health and performance.
- Oversaw the migration of 300 physical servers to a virtualized environment, ensuring a seamless transition with minimal disruption to
  operations.
- Developed an internal tool to help improve production management, streamlining processes and enhancing overall productivity.

XXX

2002 - 2006

#### **INFOMAG – System Engineer**

#### INFOMAG - UNIX/Linux System Management and Optimization

System Engineer (France)

Led UNIX/Linux optimization, storage solutions, H/A and DR implementation, electronic banking integration, monitoring deployment, automation, and tool development for enhanced IT management and productivity.

- · Performed UNIX/Linux system tuning to optimize performance, reliability, and security.
- · Architected and designed SAN HP storage solutions, ensuring efficient and scalable storage infrastructure.
- Deployed high availability (H/A) and disaster recovery (DR) UNIX Tru64 architecture along with backup solutions, minimizing the risk
  of downtime and data loss.
- Implemented an integrated electronic banking solution in retail shops, streamlining payment processing and enhancing customer experience.
- · Managed and deployed monitoring solutions for IT infrastructure, proactively identifying and resolving potential issues.
- · Handled maintenance script management to automate routine tasks and improve system efficiency.
- · Developed internal tools to facilitate better IT management and improve overall productivity.

XXX

2001 - 2002

### KAMEDIA – System Engineer

### **BUREAUVERITAS – Server Security and Backup Management**

System Engineer (France)

Steered server security, backup management, and Cisco firewall administration to maintain a secure and reliable IT environment, safeguarding critical data and network integrity.

- Managed server security upgrades to ensure the latest patches and updates were applied, maintaining a secure IT environment.
- Oversaw backup management, implementing strategies to protect critical data and ensure timely recovery in case of data loss or system failures.
- · Administered Cisco firewalls, maintaining network security and protecting against unauthorized access and potential threats.

XXX

2001 - 2001

## NEOCLES – System Engineer SERNAM – System engineer

System Engineer (France)

Led equipment migration to thin clients, facilitated knowledge transfer, and crafted an operational deployment roadmap, streamlining processes and reducing costs while enhancing support efficiency.

- · Managed the migration of equipment to thin client, optimizing hardware resources and reducing maintenance and energy costs.
- · Provided knowledge transfer to technical teams, ensuring smooth and efficient transition and effective support.
- Developed an operational deployment roadmap book, outlining the steps and procedures for the deployment of new systems and equipment.

XXX

1998 - 2001

## C&SI - System Administrator

#### 13èmeRue, Lucien Barrière, Foxkids - System Administrator

System Administrator (France / Holland)

Managed server and mail exchange administration, automated maintenance processes, and implemented remote monitoring for enhanced IT management, reliability, and proactive issue resolution.

- Administered servers and mail exchange, ensuring optimal performance, reliability, and security.
- Automated maintenance processes to streamline IT management and reduce downtime.
- Implemented remote monitoring to proactively identify and address potential issues, minimizing the risk of system failures and data loss.

XXX

## **Certifications (Active)**

Cognite Sales Enablement Basics certificate [03/2023]
Cognite Data Scientist Basics certificate [03/2023]
Cognite Domain Expert Basics certificate [03/2023]
Cognite Data Engineer Basics - Integrate [03/2023]
AWS Certified Solutions Architect – Associate [08/2022]
AWS Partner: Accreditation (Technical) [04/2022]
Cognite Basics Completion Certificate [12/2021]

## **Additional Experience**

## Coffee Production Line Showcase (2021 - 2022)

## CampusFab @Evry

- Oversaw the deployment of a physical coffee production line at Campusfab in Evry, integrating various technologies such as machine connection, MES, IoT, Cloud, and VR.
- Conducted live demonstrations for customers and visitors, showcasing the capabilities and features of the production line and the integrated technologies.



## SAP COIL - Machine Learning Hackathon (05/2019)

#### **Hackaton**

 Achieved 2nd place at the SAP COIL Hackathon with my team, demonstrating innovative thinking, problem-solving skills, and technical expertise.

