

PROFESSIONAL OVERVIEW

System engineer with over 10 years of experience encompassing all stages of the software development life cycle. He is enthusiastic about software development, emerging technologies, and innovation.

It has extensive experience developing software solutions using technologies such as Java 8 and Java 11, and working with frameworks including Spring, Spring Boot, and Hibernate. Additionally, he has also experience in creating reports using Jasper Reports for Java.

Furthermore, Marco has worked with cloud technologies like AWS for integration components and has experience with serverless architectures using Lambdas with Node.js (with TypeScript). He has experience in developing microservices and working with relational databases like Oracle (SQL, PL/SQL), MySQL, and NoSQL databases. His approach incorporates industry-best software design principles, utilizing design patterns and architectures to achieve scalability and ensure effective system maintenance.

Moreover, Marco has successfully implemented front-end solutions using frameworks like Angular with TypeScript.

He consistently demonstrates commitment, leadership, strong teamwork, perseverance, and a genuine curiosity to acquire knowledge in diverse fields. These qualities enable him to remain competitive within the industry.

Roles	)	Backend Engineer
	)	Architect
Solutions	)	Product Lifecycle Management (PLM)
	)	Enterprise Application Integration (EAI)
	)	Migration of Applications
	)	Monolith and microservices architectures
Industries	)	Financial
	)	HealthCare
	)	Airline
	)	Entertainment
Technologies or Methodologies	)	Java 8 – Java 11
	)	NodeJS for AWS Lambda
	)	Typescript
	)	Angular
	)	Java SE, EE
	)	JPA
	)	Hibernate
	)	Spring boot
	)	Spring Framework
	)	Junit/Mockito
	)	JasperReports for Java
	)	REST Web Services
	)	SOAP Web Services
	)	SQL / PL/SQL
	)	MySQL
	)	Oracle
	)	NOSQL DB
	)	AWS DynamoDB
	)	Docker
	)	Git
	)	AWS
	o	AWS Lambda
	o	API Gateway
	o	SQS
	o	SNS
	o	SES
	o	DynamoDB
	o	ElastikBeansTalk

- AWS S3
- Cloudwatch
-) Design patterns and architectures
-) Microservices
-) Event Driven Architecture
-) Serverless architecture
-) Containerized applications knowledge
-) Scrum methodology

Key Engagements

<i>Perficient - IPT healthcare</i>	Senior backend engineer	<p>Progressive migration from design to development for a strongly coupled model to be more decoupled using hexagonal architecture allowing to enhance the integration among other services on the system.</p> <p>Besides a performance improvement to cloud printing jobs using Zebra API decoupling process to a serverless function using AWS Lambdas and SQS allowing the improvement for scalability and availability of the service.</p> <p>Integration with Stripe payment gateway for billing service from inception.</p>
<i>Perficient -Loanlogics</i>	Senior Backend Software Engineer	<p>Development of microservices for a financial American application, using JAVA 11 and 15, JPA and SQL for MySQL database.</p> <p>Development of microservices using JAVA, messaging brokers like ActiveMQ and AmazonMQ, AWS SQS, CI/CD adjustments using Jenkins, integration of components using AWS in overall and Infrastructure as code using AWS Cloudformation.</p> <p>Management of scrum as the agile methodology of software development using support tools like JIRA, Bitbucket as git code management (Repository and collaborative development) and Jenkins as a tool of continuous integration, and delivery.</p>

Education

2010 - 2015 Systems engineer
Bogotá, Colombia Fundación universitaria los libertadores

2016-2017 Studying English
Bogotá, Colombia American school way

Professional and Business Experience

Perficient LATAM. (before Overactive S.A.S)

2021/06 - Curently

Role: Senior Backend Software Engineer

“Perficient is a worldwide digital consultancy that provides technological solutions for their Business-Clients in US, Latin America and India”

Project: Loanlogics (System for mortgage loans validations)

Main responsibilities included:

- System design software solution for microservices and implementation of resilient design patterns.
- Development of microservices for a financial American application, using JAVA 11, JAVA 15, JPA, Hibernate, Flyway database migration tool and SQL for MySQL database.
- Development of integration components AWS cloud technologies like SQS, AmazonMQ, etc
- Design and implementation of infrastructure as code using AWS SDK to orchestrate the creation of AWS resources for new clients in the application.
- Management of scrum as the agile methodology of software development using support tools like JIRA, Gitlab as git code management (Repository and collaborative development) and Jenkins as a tool of continuous integration, and delivery.
- Migration of infrastructure provisioning code from Cloudformation to AWS SDK improving Flexibility and customized fault-tolerant management to the creation of new clients on the application
- CI/CD implementation for SpringBoot projects

Project: IPT (Innovative Perioperative Technologies) HEALTHCARE

Main responsibilities included:

- I was mainly engaged in technical discussions concerning system design and software solutions. So, I contributed to the implementation of features using a clean architecture approach, conducting code reviews, and gathering requirements from product stakeholders. Furthermore, ensuring the transition of functionalities from the development stage to the pre-production environment.
- Involved in the migration process of legacy features
- Troubleshooting for production-level bugs
- Development of microservices using Spring Framework and SpringBoot
- Design and implementation of a hexagonal architecture from a migrated application
- Implementation of AWS Lambda functions using the approach of serverless architecture
- Integration a of the Stripe payment gateway for a billing component
- Development and maintenance of serverless functions for Zebra API printing jobs on the cloud
- Using Scrum as an agile methodology.
- **Technologies:** Java 11, typescript for AWS Lambdas, SpringBoot, JPA, Hibernate, AWS, ElasticBeanStalk, Amazon API Gateway, SNS, SQS, AWS lambda functions in an event-driven environment, Infrastructure as code for Lambdas using Serverless framework, MySQL database and using flyway as a migration tool, GitLab for Git and CI/CD pipelines, JUnit and Mockito frameworks for automated unit testing.

Prodigious LATAM.

2020/09 – 2021/06

Publicis global delivery - MMS COMUNICACIONES COLOMBIA SAS

Role: Senior Software Engineer

“Prodigious is a worldwide digital consultancy, global production platform of the Publicis Groupe that provides technological solutions for their Business-Clients around the world”

Project: CJ affiliate – Marketing company of the Publicis Groupe

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Main responsibilities included:

- Engaged in collaborative sessions focused on system architecture design, contributing to the development of integration components.
- Development of integration components to communicate a legacy application toward a new model
- Construction of serverless architecture for ETL process using AWS Lambdas, AWS S3 and react (FE side)
- Troubleshooting for production-level bugs
- Design of relational database model and queries using SQL for Oracle database
- Development of forms for taxes using Angular (FE)
- Using Scrum as an agile methodology.
- **Technologies:** Java 11, JPA, Hibernate, AWS, Amazon API Gateway, SNS, SQS, AWS lambda functions in an event-driven environment, Infrastructure as code for Lambdas using Serverless framework using Java 11 runtime, Oracle database, Jenkins for CI/CD, JUnit and Mockito frameworks for automated unit testing.

Globant LATAM. **SISTEMAS COLOMBIA S.A.S**

2018/11 – 2020/05

Role: Java developer, SSR

“Globant is a world leader in digital and cognitive transformation that reinvents business through Technology”

Project: Disney Parks – Radish project

Main responsibilities included:

- Participating in some system architecture design solutions sessions.
- Involved in the migration process for backend components of a diner reservations application for mobile in order to enhance resilient behavior using circuit breaker design patterns implemented by frameworks like Netflix-hystrix, among other strategies.
- Development of automated unit testing for enhance code coverage
- Using Scrum as an agile methodology.
- **Technologies:** Java 8, Java 11, SpringBoot, Spring cloud, JPA, Hibernate, Netflix-hystrix framework to the implementation for circuit breaker design pattern, Oracle database, Git, Jenkins for CI/CD, JUNIT and Mockito frameworks for automated unit testing.

Project: Lulo Bank

Lulo Bank is the first 100% digital Colombian bank

Main responsibilities included:

- Participating in requirements analysis and design sessions to the development of the system from scratch.
- Involved in the development of microservices using design patterns like CQRS among others
- Implementing integration components using AWS SQS and SNS in an event-driven environment
- Designing and implementing NOSQL (non-relational) database model using AWS DynamoDB
- Building microservices for authentication and authorization of users using Amazon Cognito from cloud
- Development of automated unit testing for enhance code coverage
- Using Scrum as an agile methodology.
- **Technologies:** Java 11, SpringBoot, AWS, AWS SQS, AWS SNS, AWS SES, AWS DynamoDB, Git, Circle-CI for CI/CD, JUNIT and Mockito frameworks for automated unit testing.

Project: SouthWest Airlines

Southwest is the world's largest low-cost carrier airline based in the United States

Main responsibilities included:

- Participating in requirements analysis and design sessions for a maintenance control application for aircrafts
- Implementing business flows (using pipes and filter architecture) of a monolith application surrounded by an event-driven architecture
- Building integration components using AWS SQS and SNS in an event-driven environment
- Design and implementation of entities for relational database model using SQL for Oracle database
- Troubleshooting of bugs
- Definition of behavioral automated tests using the JBehave framework
- Development of automated unit testing to enhance code coverage
- Using Scrum as an agile methodology.
- **Technologies:** Java 8, Spring Framework, AWS, AWS SQS, AWS SNS, BitBucket for Git, Jenkins for CI/CD, JBehave framework for behavioral automated tests, JUNIT and Mockito frameworks for automated unit testing.

Periferia IT Group

2017/05 – 2018/11

Role: Java senior developer
CONSULTANT

“Periferia IT Group provides software, consulting, and outsourcing solutions tailored to companies in multiple economic sectors. It is specialized in talent IT staffing and software development factory.”

Project: ATH Portal Banking

Main responsibilities included:

- Development was carried out to enable Aval bank users to register their products using Facil Pass, thus allowing them to make payments with Facil Pass cards when passing through road tolls.
- Development of personal banking, there was a need to integrate the analysis, planning, execution, monitoring, and control of new Facil Pass transactions into the banking portal.
- Design and development of the core for FacilPass were undertaken to store transaction enrollments that originated from the bank transaction flow.
- Participation in design sessions with product and architecture was done to develop and deploy applications.
- The applications were deployed using WebLogic Server 12C in a cluster with all the necessary configuration of JNDI, Datasources, and load balancing to handle application transactions.
- Project management was performed under the Scrum framework as an agile methodology.
- **Technologies:** Java, Spring Framework, Soap, Hibernate, Soap WebServices, Struts framework, SQLServer database, Maven, Oracle DB, Weblogic Server, JPA, JTA.

Project: Porvenir

Main responsibilities included:

- Design and development for insurance application in back-end and front-end using JSF and Primefaces
- Participation in design sessions with product and architecture was done to develop and deploy applications
- Building PL/SQL store procedures and SQL queries and DB views for Oracle database
- Construction and testing of Soap web services
- Working under the Scrum agile methodology
- **Technologies:** Java, JDBC, Soap WebServices, Oracle database, Maven, Oracle DB, Weblogic Server, JSF

Serviola S. A. S

2017/01 – 2017/05

Role: DEVELOPMENT ENGINEER II

“Serviola SAS provides Staffing and Recruiting to companies in multiple economic sectors.”

Project: Internal applications

Main responsibilities included:

- Participating in requirements analysis and design sessions for an ERP (Enterprise Resource Planning) application
 - Design and development of components using Java using JSF framework, Primefaces framework, EJB (enterprise Java beans) among others
 - Deployment of applications on the Oracle WebLogic server
 - Building and maintenance of database components using SQL (queries, views, among others) and PL/SQL (stored procedures, functions, among others) on Oracle databases
 - Design and implementation of financial reports using Jasper Reports frameworks for Java applications
 - Construction and implementation of Soap webservices
 - Development and implementation of REST APIs for an external application
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- Technologies: Java, JSF framework, Primefaces framework, EJB, JDBC, Jasper reports frameworks (build reports) Soap WebServices, REST APIs, Oracle database, SQL, PL/SQL, REST API, Weblogic Server.

Activos S. A

2016/02 – 2017/01

Role: DEVELOPMENT ENGINEER II

“Activos SAS provides Staffing and Recruiting to companies in multiple economic sectors.”

Project: Internal applications

Main responsibilities included:

- Participating in requirements analysis and design sessions for an ERP (Enterprise Resource Planning) application
 - Design and development of components using Java using JSF framework, Primefaces framework, EJB (enterprise Java beans) among others
 - Deployment of applications on the Oracle WebLogic server
 - Building and maintenance of database components using SQL (queries, views, among others) and PL/SQL (stored procedures, functions, among others) on Oracle databases
 - Development of integration components to sync data between 2 different applications using RabbitMQ as a message broker to receive messages from a legacy system through a queue and then use an ETL process to validate data (using SQL queries) toward a DB2 IBM database to be stored.
 - Development and implementation of REST APIs for an external application
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- Technologies: Java, JSF framework, Primefaces framework, EJB, JDBC, Jasper reports frameworks (build reports) Soap WebServices, REST APIs, Oracle database, SQL, PL/SQL, REST API, Weblogic Server, RabbitMQ message broker.

Sophos Banking Solutions S. A. S

2014/08 – 2016/02

Role: IMPLEMENTATION CONSULTANT

“Sophos Banking Solutions is a company focused on managing technological projects for the banking and financial sector.”

Project: Internal applications

Main responsibilities included:

- Development and maintenance for the SIF (Financial System) application used in fiduciary institutions over the country
- Migration of some functionalities to support the new IFRS (International Financial Reporting Standards) for the accounting module of the application
- Development of Jasper reports reports for an ERP application
- Development of the communication interface between the fiduciary applications SIF and SIFI
- Development and evolutionary maintenance for an ERP using the Spring 3.2 framework and development of web services and REST clients using the Jersey API

- Technologies: SQL, PL/SQL, Oracle database, Oracle forms, Oracle reports, Java, Jasper reports, REST API, Spring

CE ASE Ingeniería

2014/02 – 2015/10

Role: FREELANCE DEVELOPER

“Computer consulting and management activities of computer facilities.”

Project: IDIGER

Main responsibilities included:

- Development of modules of the school risk plan web application for the IDIGER entity using JSF technologies (with Primefaces), EJB 3.1, JPA, and Oracle database
- Development of the Golondrina mobile application in native Android for the perception of rain and wind in the city for the IDIGER entity
- Technologies: Java, JSF framework, Primefaces framework, EJB, JPA, Jasper reports frameworks (build reports), Oracle database, SQL, Tomcat server, Android.

ITC Consultores

2011/11 – 2014/03

Role: Junior developer

“ITC Consultores is focused on the implementation of new functionalities or businesses supported with SIFI.”

Project: SIFI

Main responsibilities included:

- Development and maintenance for the SIF (Financial System) application used in fiduciary institutions over the country
- Development and maintenance for the accounting module of the application
- Development of reports in Jasper Reports for the web application in Java Fidupagos (Web application of payments) using the iReport tool
- Technologies: SQL, PL/SQL, Oracle database, Oracle forms 6i, Oracle reports 6i, Java, Jasper reports