

Anderson Duarte Vaz

Principal Software Engineer in BigData and Contact

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Summary

I work in the software development segment for more than 15 years and 6+ years professional projects and teams management, based on projects that I got implanted I've acquired huge and solid knowledge in developing, building and architecture software. In most of these years I worked with Java Platform based systems, so I have secured knowledge in Java but also in plenty others programming languages as Ruby, Python, Javascript.

I have practical experience and conceptual knowledge of good development practices like refactoring, testing, create readable and clean code. I know that short development iterations and a closer stakeholder always ensures much of the success of a software project.

Besides I know many of frameworks I always try to solve the problems based on a good algorithm where a minimum framework use will be necessary, by this way always the solution will be more simple and easy to manage.

Techs don't solve problems, people do.

Some of my key skills:

- A passion for cutting-edge Software Technologies
- Comfortable in programming in Java (main language), Python, Ruby, Java(ECMA)script, by comfortable means knowledge in the language syntax and semantics as its ecosystem of tools, libraries and best practices.
- Very strong experience with TDD/BDD.
- Know very well CI/CD and the use of tools like Git/SNV, Source Respository Github/lab/bitbucket, Maven/Gradle, Nexus/Bamboo, Ansible, VM/Containers.
- Very strong communication skills and strong mentorship skills.
- Very strong knowledge in data processing, ingestion and wrangling and technologies for structured and unstructured data like SQL and NOSQL databases, BigData/Hadoop, Streaming Spark/Kafka.
- Very strong understanding of best practices for Software Security.
- Strong understanding in cloud computing and experience in the major ones as AWS and Google Cloud.
- Considerable knowledge in currently landscape of Machine Learning concept, libraries, tools and overall workflow.

Education

Student	Professor/Instructor
Master of Business Administration (MBA) Fundação Getúlio Vargas São Paulo 2010 - 2011 https://educacao-executiva.fgv.br/	Graduate Studies Professor Senac São Paulo 2010 - 2011 http://www.sp.senac.br
Bachelor's in Computer and Information Sciences Pontifícia Universidade Católica de São Paulo 1999 - 2004 https://www.pucsp.br/graduacao/ciencia-da-computacao	Java and Middleware Certified Instructor Oracle Brazil 2008 - Present* https://education.oracle.com/java/java/pFamily_48 <i>* I'm living in Netherlands, back in Brazil I'm still an Oracle instructor</i>
	Java/SAP ABAP Certified Instructor Impacta Tecnologia 2004 - 2008 https://www.impacta.com.br

Specializations

Certifications	Courses
Certified Web Components for Java Platform Certified Programmer for Java Platform Certified Associate for Java Platform <i>Oracle (former Sun) University, 2006</i>	Hadoop Operations: Hadoop Administration Foundation <i>Hortonworks/Teradata, 2018</i>
SAP Certified Instructor for SAP Technologies SAP Netweaver Workbench for ABAP <i>SAP University and Instructors Program, 2008</i>	MongoDB Aggregation Framework (M121) MongoDB for DBAs (M102) MongoDB for Java Developers (M101J) <i>Mongo University, 2016</i>
	COBIT - Auditing IT Systems <i>Galegale & Associates, 2011</i>
	ReST from Scratch Continuous Delivery (by Martin Fowler and Jez Humble) <i>QCon Conference Workshops, 2010</i>
	Web Application Security Training <i>Bonsai Information Security, 2010</i>
	Introduction to TCP/IP Architecture <i>Telefonica Brazil, 2006</i>

Professional Experience

Teradata

Principal Software Engineer, November 2017 - Present - Amsterdam

Responsible to help customer to succeed on BigData and Artificial Intelligence (Deep Learning) projects.

- Architect and deploy BigData data lakes based on Hadoop with orchestration and ingestion done by Kylo/NiFi and consumption with Kafka, Spark and others.
- Architect 'AnalyticsOps' workflows which automate the process of test, train, deploy and 'champion/challenge' of machine learning models for a considerable amount of different tools and frameworks like TensorFlow/Keras, with model deployment of type K5, ONNX, PMML.

Projects

Cognitive Platform

Customer

Major Spanish Bank (Name under NDA)

Description:

A platform to allow ingestion, processing and streamline paper forms such as tax submissions, mortgages, loans, etc. The platform receives the scanned document, recognise through machine learning image recognition models the type of the document, split it apart in different sub images, apply OCR to gather the text from the model and other machine learning models identify things like ticked check boxes to afterwards with all the information captured send it to the proper Bank system for further processing. This project led to a huge savings in money and time for the Bank by a significant decrease in manual and error prone processing.

Attributions:

I was responsible for create what was called as a 'Model Management Framework' component whose goal was to create a functional abstraction layer between the data scientists and the whole automated infrastructure. The MMF orchestrated all the steps needed to create a machine model such as testing, training, deploy and releasing. Applying strategies as 'Champion/Challenger' with multi model deployment. Together with the framework a business user interface was created for the data scientist trigger training, deployments and releases for the models managed by the framework.

Techs:

Python, AWS Cloud, Tensorflow, Keras, Jenkins, Bamboo, Nexus, Kafka, HBase, Docker, Ansible

Open CSAM (Open Cyber Security Awareness Machine)

Customer:

ENISA European Union - <https://www.enisa.europa.eu/>

Description:

An artificial intelligence enabled Cyber Security Awareness Machine. This system indexes cyber security information from different sources and applies NLP and Knowledge Graph techniques to enable querying the information in a more human-friendly way. Allowing the user to perform full-text search on the gathered information and create awareness reports to spread throughout the European Union.

Attributions:

I helped to define the base architecture, managed the Elastic Search cluster, implemented the content scraping web spiders, implemented the user interface and managed as a whole the technical aspects of the project.

Techs:

Python, Elastic Search, Covalent (Angular), NLP, Machine Learning, Knowledge Graph, Docker, Ansible, AWS.

Backbase

Chapter Lead/Senior Software Engineer, June 2016 - September 2017 (1 year 4 months), Amsterdam Area, Netherlands

Responsible for leading teams to develop and deploy Backbase Portal projects to customers all over the world. Talk directly to customer senior management and architects in order to understand the requirements and implement those in the product. Also act as trainer and interact with RnD department to help enhance Backbase product as a whole. I executed Backbase projects all around the world like Switzerland, Mexico, United Kingdom, Thailand, Iceland.

From Backbase CXP version 5.x to 6.x the underlying architecture changed from monolith to microservices, I helped with this process by creating a library that would allow the version 5.x of the product to be deployed in a microservices architecture.

UOL

Project Coordinator and Solution Architect, January 2013 - January 2014 (1 year 1 month), São Paulo Area, Brazil

My main responsibilities are to coach teams, design and implement systems, do trainings, suggest and make proof of concept of new frameworks and tools trying to improve overall productivity of the team that I work with.

Some of my main accomplishments:

- Managed teams simultaneously delegating tasks and coordinating releases of different projects.
- Resolved the main problem with one of the projects while leading the team with other tasks.
- Influenced other teams to use new technologies, practices and tools.
- Negotiated new features to stakeholders.
- Reduced about ~30% of the operational cost of the revenue assurance department.

Projects

Commission System

Description

A system to calculate and trigger the order of payment request for the UOL sales partners spread across entire country. This system had to deal with a considerable amount of data which were all orders sold per month by each partner.

Attributions

When I joined this project this billing engine was performing poorly, taking around **6 days** to finish the commission calculation. I rewrote the whole calculation engine from scratch in **2 months** and by changing completely the commission calculation strategy the total time to finish the calculation was reduced to **2 minutes**.

Techs:

Java 5, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Git, Jetty

Veridcad Fraud Prevention and Analysis System

Description

A rule based system to pre and post validate any subscription attempt of any service within the UOL company with the goal to avoid fraud. The system applies rules like check if the Brazilian Social Security Number (CPF) is valid and active within the Brazilian tax authorities institution, if the CPF is registered within credit protection companies and other internal rules.

Attributions

A coordinated a team of 8 people to deploy this solution. I was responsible to gather the requirements with the project stakeholders and translate them in functional requirements with the team and supervise the overall implementation.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Git, Jetty

Indra

*Senior Project Leader and Senior Solutions Architect, March 2011 - December 2012 (1 year 10 months),
São Paulo Area, Brazil*

My main responsibilities as Senior Systems Architect is help improve teams in analysis, design and development of systems, do the main design of systems which included define the layers and the frameworks, define the supporting tools, organise the development process, implement complex systems process.

My role as Project Leader is to manage the people related with the projects, estimate the projects cost, elaborate schedules, interact with the customers to understand the main scope of the projects and give feedback of the projects executions, control the whole project life cycle.

I implanted and I'm the responsible of software development good practices based on agile

techniques and so I made an impressive burst in the teams productivity.

Projects

Logistic Portal

Customer

TIM Telecommunications Brazil

Description

A platform to integrate multiple point of sale systems to into one to handle all the logistic matters. The platform handled the creation of an order until its delivery.

Attributions

When I joined this project was in a bad shape with no good management, implementation or process in place. I managed and led a team of 8 people to rebuilt this platform being responsible for the overall architecture refactoring, scalability and performance improvements. Also I deployed an agile way of work applying good software development practices which leveraged significantly the team and project performance. Was enforced a Test Driven Development coaching the team to understand and apply those methodologies. In a timeframe of 3 months the team came up with better deliveries and we regained the customer satisfaction.

Techs

Java 5, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Git, Nexus

VIVO Loyalty Program Platform

Customer

VIVO Telecommunications Brazil

Description

A platform to calculate the points of customers in the Vivo Telecommunications Loyalty Program. This project was done in house by Vivo and lately they decide to out source the maintenance to Indra.

Attributions

I managed the transition of this platform from VIVO maintenance to Indra, first understanding the overall system architecture, execution and infrastructure then created the transition schedule with the Vivo management and then I assembled a team on the Indra side to execute the migration and finally I managed the migration being the main point of contact between Indra and Vivo to ensure quality. The platform was successfully migrated and later the same team, led by me, was responsible to implement new requirements and improvements.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Weblogic, Git

Nextel Telecommunications Brazil

Billing Department System's Architect, November 2006 - July 2010 (3 years 9 months), São Paulo Area, Brazil

I had a large presence in the Billing department as responsible for many applications development, implementation and follow up in production, and collaborated with colleagues offering support and development tips. I was responsible for deployment of Maven in all department. Using the most robust standards and frameworks of Java technology I created an SOA infrastructure for applications that I was responsible and over time this architecture is now being utilised by other members of the department. I was responsible for raising the requirements with users and define how best way to implement them. I acted as development leader. I had great contact and learned a lot about the Billing System BSCS, know what they are and how the main database tables are structured, ex: clients, services, plans, contracts.

Projects

Pre Paid SMS Billing Platform

Description

A platform to consume pre paid CDR files data, calculate the amount due per customer for SMS use and ingest this information into the main platform Ericsson Billing Support and Control System (BSCS). I architected and implemented this platform from scratch handling all the data processing, wriggling and ingestion. This was a heavy data processing platform which I assured scalability, performance and data integrity.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Weblogic, BSCS

Service Platform

Description

A platform to apply targeted promotions to customers based on their mobile devices. The platform consumes CDR files and based on the IMEI used on a phone call or sms message enables promotions to customers. I architected and implemented the whole platform, handling the CDR consumption, parsing and wrangling, and afterwards applying the configured promotion based on the device found in the CDR. This was a heavy data processing platform which I assured scalability, performance and data integrity.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Weblogic, BSCS

SHIFT - Fraud Analysis and Prevention

Description

A platform to help Nextel Revenue Assurance department to analysis and prevent fraud. This systems was actually developed by Nextel Argentina. I was the architect responsible for the manage on the technical side the migration to the Brazilian market. First in Argentina I understood the overall system architecture, execution and infrastructure, then I prepared the same requirements

on Nextel Brazil infrastructure and finally I did the migration, deploying the platform on Nextel Brazil and adapting all the rules to the Brazilian market.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Weblogic, BSCS

Traffic Analysis

Description:

A platform to monitoring and ensure that each one of the CDR files that arrived for billing would make into the billing platform (BSCS). There are some stages that a CDR file pass through until finally the services use described on it gets billed. This kept a track of each file showing on which stage in the chain it was triggering alarms in case of a file stayed in the same stage for a configured threshold.

Techs

Java, Maven, JUnit, Spring Framework, Log4J, EhCache, Hibernate, Weblogic, BSCS.

Balance Consulting

Senior Java/ABAP Consultant, December 2005 - December 2006 (1 year 1 month), São Paulo Area, Brazil

I joined this consulting firm as a Senior Java Consultant and due my exposure to a set of different SAP/ABAP projects soon I got experience with it and after 10 months I was a certified SAP/ABAP professional.

Projects

Portal RH

Customer

Cia Suzano de Papel e Celulose

Description

Corporate RH Portal, with features like company news, payslip access, vacation requests, etc.

Attributions

When I joined this project was partially implemented with the main tools, frameworks and features implemented. I helped to implement several other portal features and improve the existent ones.

Techs

Java, SAP Portal, Webdynpro, ABAP, SVN

Sistema Excelência

Customer

Cia Suzano de Papel e Celulose

Description

A system to enable employee engagement and transparency on the company processes. The system had several modules like: a module that allows employees of Suzano Papel e Cellulose to offer ideas for the company processes improvement, cost reduction, quality of life or environmental responsibility. A module to provide a means to manage documents with approval control from different user levels. A control module to audit company internal processes.

Attributions

When I joined this system was implemented but wasn't performing well, a lot of bottle necks and low performance code were degrading the system. I worked on find those issues, fix them and restore system stability. Afterwards I worked on enhance the modules with new features.

Techs

Java, Tapestry, BIRT, Spring Framework, Log4J, EhCache, Hibernate, Tomcat, SAP Portal, Ant, SVN.

DESEMBOLSO

Customer

C&A

Description

A friendly web interface aimed to the retail employees to avoid make them use SAP/R3 GUI, the provided web interface allowed the subsidiaries of C&A perform operational applications to the matrix. The web interface was just a proxy to the function modules created in SAP. The idea was to streamline the ordering process of the subsidiaries without providing all infrastructure SAP/R3 GUI to them.

Attributions

I created the web interface, integrate it with SAP Function Modules and created the SAP Function Modules as well. Did the whole system implementation.

Techs

Java, Spring Framework, Struts, Log4J, JCO, ABAP, Hibernate, Tomcat, Oracle, Ant, SVN

Market Data Integration

Customer

Claro Telecommunications

Description

Integrating Claro Online Store with the Claro Clube Loyalty Program.

Attributions

I built the Web Services communication between the loyalty program provider, Marketdata, with the Claro Clube Loyalty Program. This integration allowed the maintenance of the customer personal data and the total points visualisation that a customer had accumulated in the program.

Techs

Java, Spring Framework, Struts, Apache Axis, Weblogic, Oracle, Ant, SVN.

ROSSI VENDAS

Customer

Rossi Residencial

Description

A system for the sales team to be used in the apartments points of sale showcase to facilitate the prospect creation and follow up.

Attributions

Carrying out maintenance and development of new system features supporting the sales kiosks.

Techs

Java, Struts, BIRT, JBPM, CeWolf, SQL Server 2000, Hibernate, ABAP, SVN

Gelre Trabalhos Temporários

Senior Java System Analyst, March 2003 - December 2005 (2 years 10 months), São Paulo Area, Brazil

In this company I had a great experience on how team work can make things happen. I worked together with other 20 people to implement an in house ERP system for the 3 companies of the Gelre group. We constantly discussed and tested different approaches for software development, test, quality assurance, deploy, etc.

Projects

S.I.G. - Sistemas Integrados Gelre (Integrated Gelre Systems)

Description

A system that integrate the all companies of the Gelre Group: Atra, Gelre Trabalhos Temporários and Central de Estágios. The system offered means to achieve common business processes, processes that involve maintenance of the employees register, benefits management, financial control, reports, user authentication and authorization.

Attributions

Worked with a team of 20 people implementing different requirements of each module and strongly collaborating to improve and expand the architecture inherent in the system.

Techs

Java, Apache FOP, Websphere, Oracle.

Forum Joao Mendes

Mid-Senior Java Developer, November 2000 - May 2002 (1 year 7 months), São Paulo Area, Brazil

Helped to create a system that would allow the sides of a marriage break up to split they goods.

Projects

Partilha Online (Online Asset Sharing)

Description

Web Intranet tool for creating online sharing, the system allows creating, editing, sharing all the calculations related to a financial share related with marriage break up.

Attributions

Helped to create most of the system modules.

Techs

Java, JSP, Servlet, MySQL, Tomcat

Telefonica

Customer Service Supervisor, August 1999 - October 2000 (1 year 3 months), São Paulo Area, Brazil

Initially developed activities of Senior Technical Support Analyst seeking to solve critical, serious or complex problems related with Speedy & Multilink broadband products.

In 9 months I became a supervisor of a staff of 20 people with the responsibility to do monitoring, action plans aimed at customer care quality and overall people management. During the period of supervision I performed parallel activities like the redesign of the analyst on board process, creating the training methodology and contents, the program has been redesigned from initial interview with the candidate to your his/her first appointment.

Also I created from scratch an intranet to provide services to the HelpDesk, the intranet provided dynamic communication between the help desk analysts with the back office department decreasing the time for the resolution of the critical issues by over 100%, also it provided a full set of configuration guidance on all major Operational System at time, including Linux, Windows 3.11, 95, 98, NT. The Intranet was created with ASP and Access database and Microsoft IIS web server.

Sistema Brasileiro de Televisão - SBT

Advanced Technical Support Analyst, October 1998 - August 1999 (11 months), São Paulo Area, Brazil

Solving error connecting to the Internet, configuration of e-mail clients on all operating systems. General help desk.