Alonso Isidoro Román.

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https://github.com/alonsoir
about.me/alonso.isidoro.roman
aironma2k.worpress.com

Big Data / Software Back End engineer
Strong web-based architectures and JAVA programming knowledge as well as solutions design
and mobile development
Project management and project delivery skills
Native Spanish/Fluent English
Initiative, leadership, adaptability

EDUCATION

2003 - **MS in Software and Systems Engineering** (*265 credits*)
Extremadura University, Politecnica Caceres, Spain

Postgraduate Studies

Java/J2EE-Oracle-XML (352 hours) Finished
Advanced Java Programming Course (42 hours) Finished
Web Services Programming Course (94 hours) Finished
IOS 5 course (90 hours) Finished
PHP, JAVASCRIPT, HTML (750 hours) Finished
Introduction to MapReduce Programming, with Glen Mules and
Warren Pettit, BigDataUniversity.com (40 hours) Finished
Hadoop Fundamentals 1 - Version 2 with Keith McDonald,
Akmal B. Chaudhri, Bradley Steinfeld, Carlos Renteria, BigDataUniversity.com ((40
hours)) Finished
Stream Computing 1, with Martin Siegenthaler, Robert
Uleman, Anjali Agarwal, Rachit Arora, BigDataUniversity.com. (40 hours) Finished
Introduction to Scala, with Jamie Allen,
BigDataUniversity.com (40 hours) Finished
Machine Learning Course, from Andrew Ng, Stanford
College, Coursera.org (480 hours) Not finished yet.
Master Big Data Expert, from Fernando Agudo Tarancon,
formacionhadoop.com (150 hours) Finished

TECHNICAL SKILLS

Java, Eclipse IDE, Netbeans, Maven, Spring framework, Spring MVC, Web Flow,
security,spring-jdbc, spring-aop, Quartz, Hibernate, JUnit framework, JSP, HTML, XHTML,

CSS, JavaScript, AJAX, JSF components, SQL, HQL, Tomcat, PostgreSQL, ORACLE, Google APIs, jasper reports, velocity, linux, SVN, Gantt diagrams, UML, issue tracker management, SCRUM project management, pig, hive, jaqul, map reduce task over apache Hadoop, apache spark, cloudera manager, Cassandra, flume, sqoop, Scala, machine learning,HBase,mongodb,kafka, Twitter api, Facebook api, Deeplearning4j.

Extensive knowledge of several web-based Frameworks focus to J2EE technology like Struts, JSF, iBatis, Axis, Apache CXF, Apache open fire (xmpp server), smack (xmpp client technologie), apache activemq, Openxava, concurrent programming with J2ee , spring-data project.

Knowledge of IOS5 and XCODE technologies. A couple of prototypes already made.

Extensive knowledge about Design Patterns, like Model View Controller, Data Access Object, Value Object, Business Object, Facade, SOA, Decorator and Microservices development patterns, like Orquestation and Choreography.

Extensive knowledge about SQL and the modelling-design of Databases.

Knowledge of tools for quality assurance, testing and continuous integration like Hudson, Jenkins, CheckStyle, PMD, Findbugs, Jmeter, Junit, Mockito, Jprobe and Selenium.

Knowledge of Maven,Ant and SBT for the project management. Nexus as maven repository management.

Who am i?

A software engineer, eternal learner, timelessly curious, i prefer the backend layer instead of the front end layer, i love science, all of them, but particularly particle physics, astrophysics , DNA study and everything related to machines. That is the main reason why i loved big data field because this technology can improve their development and study. I also love arts and artist from reinassance movement, DaVinci, Michellangelo, Rafael, of course Goya, Velazquez, El Greco, Tiziano, representatives of the impressionist movement, such as Van Gogh, Renoir, Monet, Degas. Of those who are alive I like Antonio Lopez very much.

PROFESSIONAL EXPERIENCE

Stratio September 2017 - Actual days

I joined this company to further develop my skills in the field of big data as a data engineer and software architect.
In my time with Stratio it gave me time to participate in the design and development of a project to NCOI (NCOI Opleidingen, @NCOIopleidingen), designing and developing a scalable microservices architecture to be able to inject data into a spark cluster. These data are used by a referral system so that college students get the best possible referral based on what the college knows about them.

The idea is to design a scalable distributed architecture of power and data consumption

following the CQRS pattern, Command Query Responsibility Segregation, so that following this pattern, I can segregate the writes and readings in a distributed system so that the writes go to a cluster of data independent of the other cluster of data readings. Together with the use and implementation of an architecture based on microservices dockerized and managed with Mesos following the Orchestrator pattern to manage the distributed transactionality inherent to each of the microservices together with a series of steps based on classification algorithms (machine learning), mis colleagues and I built this architecture to give the best possible recommendations to the students of the university.

I was in charge of designing and implementing the distributed architecture and my fellow data scientists in the selection of deep learning algorithms and implementation of the different phases for classification.

I am using java, spring-boot, spring-cloud technologies like Eureka, Ribbon, Feign, docker, mesos, kafka, a distributed postgresql port develop by Stratio.

Unfortunately, during my stay in Stratio, I was detected a disease that has kept me in physical rehabilitation and months of hospitalization, but thanks to the work of my doctors and medical advances, they have allowed me to keep my head cold knowing that one day I could professionally develop software again. I already have a medical discharge.

Just after having enough physical health and while doing rehabilitation, I've been working in my spare time on a number of open source projects, the first of them related to scalable event-oriented recommendation engines based on apache spark deep learning algorithms, using kafka as an event engine, mongodb as a persistence engine, written in scala and published in GitHub.
The link is https://github.com/alonsoir/awesome-recommendation-engine

I have also worked on a personal project designed to detect and classify variable stars in stellar images taken by radio telescopes. This type of stars allows you to create a map to create routes in interstellar space.
The link in GitHub is https://github.com/alonsoir/demo-dl4j

I have also been researching the use of api deeplearning4j for facial recognition , work in progress.
https://github.com/alonsoir/demoFaceRecognition

I have also worked on designing and implementing a scalable orchestration-based microservice architecture in order to periodically interrogate the bitcoin quote and make it available for multiple outside requests. I used java, spring-boot, kafka, elastic-search and docker.
The links in GitHub are:
https://github.com/alonsoir/demo-kafka-elastic
https://github.com/alonsoir/demo-quartz

Also I have been working during the end of the year on a project to try to find out the

numbers of the euromillions and the primitive, with little success but very useful because it has allowed me to practice with the functional style of the api stream that appeared with the jdk8.

I have participated in the review of a book on Kafka-streams of the Packt publishing house, both of the text and of the code. https://github.com/alonsoir/kafkaStreaming.

Keedio Nov 2016 - 1 Junio 2017 (development)

I have participated in the development and integration of a lambda architecture created for Banco Santander in order to apply a solution imposed by the central banks to these systemic banks too big to fall, Basilea 4. The idea is to process multiple sources of unstructured data To finally arrive at a calculation of the credit risk of the bank Santander. For this we need the use of a series of components, such as Apache Flume and Apacha Kafka for the raw data intake in avro format in the landing zone of the data lake, then we have a series of engines in charge of the consolidation of the files Avro in other format parquet, which would then be exploited in the form of Hive tables in the integration with the company that is responsible for the exploitation of architecture, enrichment engines, user view creation engines that are also used for a Last phase where we create an excel file. The technologies used are scala, java, hadoop, cloudera, spark, kafka, flume, shell scripts. My concrete participation in this project was to create a utility to create files parquets, validation, correction in case of error, parts of the api, as a set of works spark to validate quantitatively and qualitatively the architecture delivered, as well as another part of the api Responsible for making necessary currency conversion, since the solution delivered is designed to be executed generically for all delegations of the Santander bank in the world, sixteen today. I was also in charge of integrating the software in the place of exploitation chosen by the Bank.

Feb 2016 -Nov 2016 (TRAINING, LEARNING and development)

I have been studying and doing various training courses, like learning scala more seriously with BigDataUniversity, machine learning with Professor Andrew Ng and Apache Spark and hadoop architectures using a formacionhadoop.com course. As a result of that training I have written a couple of projects hosted on github to treat tweets in near real time using apache kafka, apache spark and some nosql databases like mongodb and Cassandra and another project about how to implement machine learning algorithms (ALS) for a recommendation engine. This project uses Apache hadoop and Apache Kafka and apache Spark, both projects are developed using the Scala language.

https://github.com/alonsoir/hello-kafka-twitter-scala

https://github.com/alonsoir/cassandra-spark-twitter-scala-app

https://github.com/alonsoir/awesome-recommendation-engine

(Synergic Partners) Nov 2015 - Feb 2016

I am working with Synergic partners, a telefonica company, as a big data architect. My task is to design big data architectures for different clients of Telefónica and synergic partners alone. So far I have participated in the initial proposal for some banks, and a local newspaper, as well as maintaining the formation cluster we have in the company. The cluster is handled with Cloudera Manager. I am learning scala and big data programming skills with BigDataUniversity.com in my free time.

(Tektronix) Sept 2014 - July 2015

I'm participating in the development of a BigData project related to the field of telecommunications. The goal of the project is to show on a map the incidents in real time based on telecommunications optical fiber of a big city. The related technologies are Java, apache spark, Impala, HDFS, maven, postgresql, linux for part of the back end, which is where I'm working.

(TRAINING, LEARNING and development) Feb 2014 - Agosto 2014

I have developed a java map reduce task with the data provided by datos.gob.es, a initiative from the spanish goberment, i also develop some proof of concepts about how to use map reduce task with Facebook data and every project i have search on the internet related with map reduce tasks. Also i developed a proof of concept about how to get real time data on a web broser using web sockets , spring integration, rabbitmq with stomp support, html5 and jquery. The purpose of this proof of concept is to know where are the different buses of Dublin city, so that every person can see the bus in a map provided by google maps. I made another project, this one related with the use of how to mix different technologies like mongodb, spring mvc, rabbitmq broker message with stomp support and a bit of html5, jquery and css3. The purpose of this project is to save different events provided by a user. I started my own tech blog, aironman2k.wordpress.com and finally i started to learn a new and promising framework related with Big data field, apache spark, with cloudera, how to use it with other technologies like apache kafka, apache flume, mongodb.

(TRAINING, LEARNING and development) January 2014 - Feb 2014

I am currently taking a course from BigDataUniversity.com in order to master techniques for big data. Actually i have two diplomas, but i am going through the third one, besides i just updated my github account with map reduce tasks with real data taken from datos.gob.es, the spanish open data initiative from the government.

Bigdata, apache hadoop, pig, hive, jaql, MapReduce, apache spark, apache kafka, cloud, BigInsights from IBM.

(Naevatec) Sept 2013 - January 2014
Software engineer. R&D.

I help to develop the core of a set of restfull web services for a whatsapp type service, also i had to develop a couple of Controllers using iOS and XCODE. The technology was a mix of j2ee 1.7, spring*, hibernate and bouncy castle for the java core and objetive C and Xcode for the iOS app. The core is an implementation of the command pattern over a set of RESTFUL web services implemented with spring MVC.
The service is deployed and ready to use for the Hospital Niño Jesus from Madrid ***http:// www.madrid.org/cs/Satellite?pagename=HospitalNinoJesus/Page/HNIJ_home***

JORGE CALBO ONSURVE - *LAW OFFICES*
January 2013 - August 2013
Partner and Technical Director.
Hired to launch a new product. Work side by side the client since Jan 2013 to present day.
I made research about <u>OPENXAVA</u> framework and started a project for industrialize the process of creating demand on payment arrears with delinquent tenants of a neighboring community or rural.

SMARTBUYER, *Consulting project*   *August 2011 - December 2012*
Design, testing, development and deployment.
I built an IOS5 based application that makes heavy use of geo-location and consumption of Web services. After I finished developing the application, I decided to create a complete solution that allows businesses to buy products at a physical store using the smartphone's camera to read barcodes and Web services on the server. On the server side, the technologies used on the implementation were - apache CXF RESTful web services, JSON and / or XML as a mechanism for exchange of information, HashMaps competing for a cache in which to save the customer information, items to sale and the accounting entries from the sale of items, - a thread engine to launch the consultation request and / or updates on the map, hibernate as a persistence and MYSQL as an engine for data persistence. I have pending to upgrade the system with a NON SQL connector like spring-data project .

INSURANCE OCASO
March 2011 - July 2011
Software developer and testing.
I implemented operational functionality, such as Research Records, Dispatch management legal advice ...
The technology used is Spring MVC, ajax, hibernate, Rational, Websphere 7, jquery, prototype, WAS7, jdk1.6, Clear CaseNovember 2010 March 2011The client was the Ministry of Justice, Government of Spain and the task was to develop the electronic apostille. I used a framework based at the ministry's own Spring MVC, Spring WebFlow, hibernate, ajax and use of caches, specifically EHCache.

ING DIRECT BANK   *Sept 2010 - Nov 2010*
Software developer and testing.
The client was ING Direct and my job was to tune and customize Alfresco Comunity Edition in a production environment so that the client could store their web pages, could autodeploy if system crash. This feature does not have the community version and asked me to devise a solution that would allow.

The solution was a mixture of bash shell scripts, Cron and modification from sources project from Alfresco.

PEUGEOT / CITROEN
Jan 2010 - Sept 2010
Consultant, Software developer - R&D.
(Software development and testing).
I started working for ATSistemas, the customer is the Group Peugeot / Citroen, at the factory located on Calle Eduardo Barreiros Madrid. My job was to design and implement a range of business services related to how quality management is performed at their factories. The project involved drafting a quality report indicating weak points and strong points of the architecture.
Technology used - Spring framework, namely SpringJDBC for the persistence layer, j2ee services that have injected the damages.
I also designed and implemented a concurrent and distributed cache adapted to customer needs, based on the use of ConcurrentHashMap class, threads iterating over this cache and implentacion Sun's Java Message Services to let persistency over the data.
(To perform the quality and performance report I relied on the use of the tools Google Page Speed and Yslow.)

STATE GOVERNMENT OF EXTREMADURA, Dept. of Health
Oct 2009 - Jan 2010
Programming Analyst
I started to work with Sadiel, http://www.sadiel.es/web/sadiel for a project for the Department of Health and dependence to define a development framework that would meet the needs of all stakeholders in development teams. The project took off as mades, is based on a framework of the Junta de Andalucia.
http://www.juntadeandalucia.es/xwiki/bin/view/MADEJA/

L'OREAL   *March*
2009 - June 2009
Technology Consultant
During this period, performed the installation and configuration of about 80 machines with their OS and office suites, as well as individual configuration.

SPANISH CONFEDERATION OF SAVINGS BANKS, (CECA)
January 2009 - March 2009
Analyst, testing
Conduct safety audits of electronic banking software that is being implemented in the savings banks, using JMeter and JProbe to detect memory leak problems as well as performance issues

FOGASA, Govern of Spain, Spain.
Nov 2008 - Dec 2008
Consultant, developer and testing.
Telematic project for a Wage Warranty Fund.
Collaborate on product integration functionality by adding a series of web services that provide electronic signature with national manufactures coin and stamp. FNMT http://www.fnmt.es/

TELEFONICA - R&D   *May*

2008 - November 2008
Technology consultant, research and development, testing, technical leadership.
Project e-marketplace Telefonica R & D. In this project I work as a consultant, especially much R & D to design and implement an SOA architecture based on Java, learned to handle the java api and Websphere Service Registry (WSRR) from IBM, as well as its management interface, web services Java, mixed with different access databases, in addition to better knowledge of English because I had to work closely with IBM consultants foreigners.

YELL SPAIN, Madrid, Spain.   *August 2007 - May 2008*
Consultant, Developer, R&D.
Implementation of several J2EE-based SOA architectures for use in a new version of the website of the yellow pages and white pages.
www.paginasamarillas.es
 R & D / Enhancements and features.

AVIVA INSURANCE Badajoz, Spain.
November 2006 - July 2007
Developer, R&D and testing.
Builder project / Implementation of maintenance of proprietary architecture based on AndroMDA technology http://galaxy.andromda.org/
In this project I work on technical design and implementation of a number of cases of end user applications for AVIVA, asurance business
 HYPERLINK "http://www.aviva.es/es/corporativa/"http://www.aviva.es/es/corporativa/
Indra software labs, Badajoz, Badajoz, Spain.

ELECTRICAL NETWORK OF SPAIN, Badajoz, Spain.   *October 2006 - November 13/11/2006*
Developer, testing.
REE-ARAP Project (Spanish Electricity Network) http://www.ree.es/
Users Maintenance DIRA integrated proprietary system.
Indra software labs, Badajoz, Badajoz, Spain.

AMAEF Project (Association of Financial Institutions for Insurance Mediation),
Badajoz, Spain,   *June 2006 - October 2006*
SR. Programmer , testing.
Develop with Indra a solution for banking and insurance could communicate with each other. Intensive use of web services and caching resources with a good class design using patterns like singleton, single sign on, facade, aggregation, data access object
Indra software labs, Badajoz, Badajoz, Spain.
http://www.amaef.es/

INDRA SOFTWARE LABS, Badajoz, Spain.   *May 2006 - June 16.6.2006*
R & D in Java Server Faces, Java Studio Creator 2, we made a port of a use case VFINCA a JSF project.

INDRA SOFTWARE LABS, Badajoz, Spain.
February 2006 - May 2006
SR. Programmer
VFINCA Project, Securities and investment funds.
Data base admin, J2EE programmer.

INSURANCE IBERMUTUAMUR Indra, Telenium. *Madrid, Spain,*   *October*
2005 - January 2006
Analyst, Developer.
IB Training Project: System user multi user management
And Ibermutua customers. http://www.ibermutuamur.es/ medical assurance.

INSURANCE MAPFRE, Madrid, Spain,   *May*
2005 - October 2005
Programmer Analyst Jr
Project ST-CAT (Work System for Territorial Administrative Centres).
Multi-entity for the management and treatment of collections at offices and workplaces across the national network of Mapfre Mutual.
Development and design tco.
Technologies: Java/J2EE, JSP, JDBC, Servlets, JavaBeans, EJB, XML, XSL, Eclipse, WSAD, UML, Architecture mapfre version 2.

AREA 10, Badajoz, Spain.   *Sep 2004*
- February 2005
Developer
Development of a range of applications in visual basic 6 with their design of databases on Access2k: a complete application for inventory control and another to consult on the set of distance learning centers throughout Spain.
Application Development in Visual c + +. The first data to insert that came home in q19 format and insert them into a DB in Access 2k and other MySQL DB. The other application was to extract data from the databases and generate a q19.
Maintenance and expansion of the website "http://www.area10.es/" www.area10.es, developed with php, html, css, javascript and mysql.