

## Alfredo Bello

### Summary

- Developer/technical lead with a master degree in computer science.
- Full stack developer with more than 14 years of experience in web applications.
- More than 2 years developing SPAs (single page applications) with angular and expressjs over docker containers.
- Experience in devOps applications like jenkins, vagrant and docker with continues integration.
- Wide experience in J2EE applications with glassfish, tomcat ee, wildfly and spring.
- Spring Boot developer with more than 4 years of experience.
- Expertise in old technologies like bootstrap, jsp, servlets, java beans, Daos, jquery and ajax.
- Excellent experience in code quality with, findbugs, pmd, checkstyle, sonarqube, jslint, eslint and proguard.
- Experience in Postgres, Mysql, SQL server, H2, SQLite and MongoDB.
- Good understanding of Agile/SCRUM with the ability to conduct SCRUM meetings and good practices.
- Expert in software testing with different tools like junit, mocks, TDD, BDD, Chai, Mocka Jazmine, Test containers.
- Wide experience in Git and Git Flow
- Expertise in several design patters like MVC, Mediator, Singleton, Adapter and Chain of responsibility
- Proficient knowledge in Javascript/Typescript with several frameworks like Expressjs, Angular and NestJs.
- Good experience in build tools like Maven, Gradle and Gulp.
- Wide experience in multi-threading applications in java.
- Expert in restful web services.
- Enthusiast linux user.
- Basic knowledge in machine learning with python, pandas, sklearn and acanaconda
- Basic practice with python django

## **Work Experience:**

**Position:** Senior Backend developer

**Company:** Encora

**Jan 21 – present**

### **Description**

- Track game sells (video games)
- Apply discounts in video games.

### **Responsibilities**

- Communicate microservices with messages.
- Implement good practices in microservices.
- Create rest apis with nestjs, mongoose and mongodb

### **Environment**

AWS SQS, AWS ECR, NestJs, MongoDB, Typescript, Jest, ESLint, Mongoose, Docker, Docker Compose

**Position:** Front end Technical Lead

**Company:** IBM

**May 20 - Jan 21**

### **Description**

- Capture information from squads working in remote places.
- Calculating workers' biatical/meals
- Assigning working hours of the remote squads
- Calculate roster of the team.

### **Responsibilities**

- Design website to track the hour of remote employees.
- Create and develop in Angular website.
- Layout the prototype and show it to the customer.
- Responsible of production deployment
- Assign task to developers.
- Talk to the customer and the business analyzer to create user stories.

### **Environment**

Angular, express, Docker, Jenkins, Jira, Typescript, Eslint

**Position:** Technical Lead  
**Company:** AstraZeneca  
**Jan 19 - May 20**

### Description

- Take architectural decisions about system design.
- Define project process.
- Rectify errors found in process.
- Implement best practices according to client or company standards.
- Identify project risks.
- Take responsibility when the team or project are ambiguous.
- Assign responsibilities to each member of the team.
- Responsible of the planning and execution of the systems.
- Help teams to achieve their goals related to the project.
- Solve problems related to devOps.
- Identify and clearing road blocker of the team.
- Help new developers through mentoring.
- Provide micro-services to speed up common functions of developers.
- Unlock problems related to continues delivery.
- Fresh developers mentoring.
- Review code automatically.
- Lead support team.
- Verify that app demos were executed properly, in the right environment.
- Verify that developers create their code with TDD.
- Verify that developers follow the rules and standards.
- Define Rules and standards for developers.

### Responsibilities

- Manage Algorithm club.
- Mentoring classes.
- Review App Demos.
- Code review with Sonarqube, PMD, FindBugs, Checkstyle, ESLint, JSLint and Proguard.
- Support team were my responsibility.
- Template creation to speed up development and adapt code to architectural decisions, creation of Angular, Expressjs and Spring boot templates to save time.
- Creation of micro-services to provide common functions like (send emails, create users, send notifications to mobile apps, track errors etc) with Spring boot.
- Automation team were over my supervision.
- Ensure that all the teams follow best practices executing automatically code reviews in Jenkins pipeline.
- Check code complexity of entire code team with Sonarqube.
- Create functional test of developer's code in support team.
- Create documentation in Confluence about all architectural designs.
- Unlock problems related to Docker, Jenkins and CI/CD
- Help Business Analyst to give a better understanding of the software complex.
- Restrict to send bad quality of the code with Husky.
- Verify code coverage with Jacoco.

### Environment:

Docker, Postgres, MongoDB, Expressjs, Angular, Ionic, Typescript, Nodejs, Spring Boot, Javascript, Java, Sonarqube, PMD, FindBugs, Checkstyle, ESLint, JSLint, Proguard, Jenkins, Docker, Husky, Jacoco.

**Project:** Datahub  
**Company:** AstraZeneca  
**Sep 18 - Dec 18**

### **Description**

- To track all the assets related to labs.
- To calculate the value of specific lab base on assets.
- Provide finance information about the assets like cost.
- To know who is the responsible of the assets.
- To schedule assets transitions (move assets from one place to another).

### **Responsibilities**

- To choose better architecture and avoid blocking developers job.
  - Create an API in Spring boot to handle different clients like web and mobile.
  - Persist object into the database with JPA, Hibernate and Spring repositories.
  - Manage database migrations over Flyway with Postgres DB.
  - Use TDD to create new code with Junit.
  - Use H2 database in test environment to create real testing.
  - Automatic code review with PMD, FindBugs and Checkstyle to avoid bad practices in local environment.
  - Automatic code review with sonarqube in dev, test, preprod and prod environments to calculate cyclomatic code complexity, code smells and track bugs to guaranty code quality.
  - Create a front end in Angular and Typescript served with Expressjs to track assets.
  - To use ESLint in order to check bad practices and code quality in Typescript.
  - To use JSLint in order to check bad practices and code quality in Javascript.
  - Create testing with Mocha and Chai in Javascript.
  - Create testing in Angular with Jazmin and PhantomJS.
  - To use Husky in Javascript to avoid pushing bad code to the repository.
  - Review code with Sonarqube to check the quality of the software.
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- Convert user stories in functional system.
  - Help to BA to analysis the problem.
  - Lead front end and backend developers.
  - Approve pull requests.
  - Follow Agile Software development with Scrum Methodology.
  - Create environments (dev, test, preprod and prod) in Jenkins and Docker.

### **Environment:**

Postgres, H2, Flyway, Junit, Mockito, TDD, Javascript, Expressjs, Angular, Angular Material, Typescript, PhantomJS, Mocha, Jazmine, Chai, ESLint, JSLint, PMD, Checkstyle, FindBugs, Sonarqube, Jenkins, Docker.

**Project:** Empower Lace Application (ELA)

**Company:** AstraZeneca

**Dec 17 - Ago 18**

### **Description**

- Automate routine of OP (Operation Process) for 900 computers around the world.
- The automation of the process was to execute a thirty-party software that checks the integrity of the software installed in the computer connected to the chromatogram.
- Track every execution of thirty party software.
- Execute the OP in all the machines at the same time.
- Review that the process finished properly and generated a report.

### **Responsibilities**

- To create an API in Spring Boot to handle the execution of the process remotely.
- Use H2 database in test environment to create real testing.
- Persist object into the database with JPA, Hibernate and Spring repositories
- Use TDD to create new code with Junit.
- Automatic code review with PMD, FindBugs and Checkstyle to avoid bad practices.
- To create a remote client in java to send information to the main server.
- To create a windows service with Apache Commons Daemon and run the remote client.
- To create a front end in Angular Typescript and ExpressJS in order to run the execution of the thirty-party software and download the reports.
- To use ESLint in order to check bad practices and code quality in Typescript.
- To use JSLint in order to check bad practices and code quality in Javascript.
- Create testing with Mocha and Chai in Javascript.
- Create testing in Angular with Jazmin.
- Review code with Sonarqube to check the quality of the software.
- Manage migrations over Flyway with Postgres DB.
- Convert user stories in functional system.
- Help to BA to analysis the problem.
- Lead front end and backend developers.
- Approve pull requests.
- Follow Agile Software development with Scrum Methodology.
- Create environments (dev, test, preprod and prod) in Jenkins and Docker.

### **Environment:**

H2, Flyway, Junit, TDD, Javascript, Expressjs, Angular, Angular Material, Typescript, Mocha, Jazmine, Chai, ESLint, JSLint, PMD, Checkstyle, FindBugs, Sonarqube, Jenkins, Docker.

**Project:** Qualys Data Process Tool (qualys DTP)  
**Company:** AstraZeneca Security Depot  
**Jun 17 - Nov 17**

### **Description**

- Qualys is a thirty-party software that scan computer and detect vulnerabilities, the main goal of the project was to process the result (CSV file) of Qualys and detect which servers/computers are not in compliance.
- The process of the file was to count how many vulnerabilities has to computer and classify the computer in different groups depending on vulnerability severity.
- Calculate how many times the computers are not in compliance.
- Generate a report of how many computers are not in compliance.

### **Responsibilities**

- To create a front end with Angular, Typescript and Expressjs to upload the CSV files and download the report.
- Analysis the problems with the client, this project didn't have a BA.
- To create a Spring Boot API and process the file.
- Persist object into the database with JPA, Hibernate and Spring repositories
- Automatic code review with PMD, FindBugs and Checkstyle to avoid bad practices.
- Manage database migrations over Flyway with Postgres DB.
- Review code with Sonarqube to check the quality of the software.
- Manage migrations over Flyway with Postgres DB.
  
- Convert user stories in functional system
- Follow Agile Software development with Scrum Methodology.
- Create environments (dev, test, preprod, prod)

### **Environment:**

Postgres, Flyway, Junit, TDD, Javascript, Expressjs, Angular, Angular Material, Typescript, ESLint, JSLint, PMD, Checkstyle, FindBugs, Sonarqube, Jenkins, Docker.

**Project:** **Mobility Portal**  
**Company:** **AstraZeneca**  
**Feb 17 - May 17**

### **Description**

- Create a portal to enroll mobile devices to Airwatch and use the resources of AstraZeneca like email, chat etc.
- Collect some data about the user and the phone to send this information to Airwatch.

### **Responsibilities**

- Convert user stories in functional system.
- Create a monolithic application served in Java with Spring Boot.
- Create a front end in Angular and Typescript to collect the data of the user and mobile phone.
- Send the collected data to Airwatch through restful services.
- Follow Agile Software development with Scrum Methodology.
- Create environments (dev, test, preprod, prod) in Jenkins.
- Support the application for errors.

### **Environment:**

Postgres, Angular, Angular Material, Typescript, Spring Boot.



**Project:** Values at work (ivalue)

**Company:** AstraZeneca

**Sep 16 – Feb 17**

### **Description**

- Create a web app, mobile application, to show policies, news and code of conduct about the company.
- Ivalue shows information related to news, policies and code of conduct of each country.
- This application runs in several devices like mobile, web and desktop.
- It requires an administration system to manage countries and users.

### **Responsibilities**

- To create monolithic systems that serve Angular static files with java Spring Boot.
- To create mobile application with Ionic to show policies and new in user's devices.
- To create web application to manage policies and users.
- Persist object into the database with JPA, Hibernate and Spring repositories
- Convert user stories in functional system.
- Follow Agile Software development with Scrum Methodology.

### **Environment:**

Ionic, Typescript, Spring boot, Postgres.

**Project: DST Ticketing**  
**Company: IBM**  
**Feb 14 – Sep 16**

### **Description**

- DST Ticketing is a system that follows problems, issues and concerns about problems related to computers and servers, it uses a MDR (Master Data Repository) to extract the information related to servers, this database is supported by sysadmins. The system track comments and files related to the ticket and marks the tickets with due day if the ticket has more than 3 days, the system sends emails to the users related to the ticket.

### **Responsibilities:**

- Create a scheduler in python to mark tickets as due.
- To create a front end with html and dojo.
- To create a back end in PHP to save, update, delete tickets over Code Igniter.
- Save, update and delete data in Mysql.
- Work in the back-end and front-end.
- Create module to send emails to the customers in PHP.
- Create the view to show information about of the ticket with HTML, CSS and Dojo.
- Implemented web wizards to improve the experience with customers.
- Review code of others developers to improve the quality.
- Create libraries in code igniter for other developers.
- Track every transaction of the database with PHP.

### **Environment:**

linux, java, python, php, apache, mysql, dojo, codeigniter, jazz, mvc, git, scrum, RTC

**Project:** Network Monitoring System  
**Company:** General DataComm  
**6 Months**

**Description:**

- The system monitors the network sending ping to all the computers and servers, and save if the result is positive or negative, the sizes of the network were more than 10 000 computers, the pinging should be in less than a minute, if one computer doesn't response the ping that computer should be mark in yellow status which means that the computer is not available, then another process takes the computer and sends pings during 4 mins, if the computer doesn't response is marked as red and is not available in the network.

**Responsibilities:**

- Create a multi-threading (thread-pool) module to send ping command in Java 7.
- Create a JSP, Servlets and Html web site to show the reports with Glassfish.
- Use Hibernate to Persist objects in Mysql database.
- Automate builds with Maven.

**Environment:**

glassfish, java, maven, mysql, hibernate, dao, thread pool, linux

**Project:** Syspro Application Manager  
**Company:** General DataComm  
**2 years**

**Description:**

- The main goal of the project is to collect data over the network through mirror port, all the data should be capture.
- Front end should show charts about statistics of the network like ranking of IP address that consume network, which protocol is the most used, which website has more requests and so on.
- The project is not limited to only one site is possible to capture other remotely networks.
- Remote sites send the information over sockets in binary format to the main server.
- The front end has the capability to drag and drop in the charts and create any combination.

**Responsibilities:**

- To create a module to capture all the packages of the network with JPCAP.
- Store all network packages in Mysqls with engine InfoBrigth.
- To create a services to provide information about the network.
- To create a server with Java Sockets to retrieve information of remote sites.
- To create a website in JSP, HTML, CSS, JQuery and MVC to show the statistics about the network with Glassfish.
- Design Responsive website (Bootstrap) to show information in different devices.
- To communicate front end and backed was with JAX-RS and JSON.

**Environment:**

linux, java, jsp, struts, pmd, restful, json, jquery, mvc, mercurial, scrum, junit, hibernate, mysql, glassfish

**Project:** Syspro Sniffer Network

**Company:** General DataComm

2 years

**Description:**

- Desktop application to show information about network with statistics like ranking of IP address that consume network, which protocol is the most used, which website has more requests and so on.
- Server application is use for capture network traffic and store it into database.
- Process packages to reduces query time is made in server side.
- InfoBrigth was use to increase query time.

**Responsibilities:**

- To create a desktop application with Java Swing.
- To spread desktop application with Java Web Start.
- To create drag and drop items in desktop application with Swing.
- Connection with database was with Glassfish Connection-pooling and Mysql.
- To use Hibernate to persist object into Database.
- To communicate systems with JMS.
- To check code for bugs with PMD.

**Environment:**

linux, glassfish, java, swing, pmd, mercurial, junit, hibernate. jms, mysql

**Project:** Phone Call Monitor  
**Company:** General DataComm  
**8 months**

**Description:**

- This project is to read the result of Cisco Voice Manager (CVM) and make the summary of the calls then the data is stored in the database to do some statistic about which phone consumes more network and which protocols are the most used.

**Responsibilities:**

- To read text plain file (CSM file) and stored into the database Mysql.
- To perform SQL queries in back end to create statistic about phone calls.
- To create a website in PHP, HTML, CSS and JQuery to show information about calls.

**Environment:**

linux, apache, php, mysql, jquery

**Project:** [Sispro Traffic Filter](#)

**Company:** [General DataComm](#)

**2 years**

**Description:**

- This project is related to filter websites and restrict access to internet. In order to do the filter, I did use Squid which is a proxy, and it can filter websites and grant access to internet, the project is a wrapper of this system.

**Responsibilities:**

- To research a program open source for filter web sites, install it, configure it,
- Create a frontend in JSP, Servlets, Struts, jQuery and Glassfish to show the data,
- Understand the format of the logs, read the logs with java to save the data in MySQL,
- Design database structure with Mysql Workbench.
- To test squid guard in a network as transparent proxy and also as gateway.
- Export the data to excel files with POI library.
- To create PDF reports with iText java library,
- To create a bash file to install everything.

**Environment:**

squid, jsp, struts, jquery, uml, servlets, junit, glassfish, hibernate

**Project:** [Sispro Traffic Shaper](#)  
**Company:** [General DataComm](#)  
**1 year**

**Description:**

- This project was a wrapper of master shaper open source project, master shaper balances all the traffic of the network and another website shows the configuration of the balancer.
- Project was made the front-end with the specifications of the client

**Responsibilities:**

- To research a program open source to balance traffic network.
- To install, configure and detect how to get the data of the software.
- To create a front-end in JSP, Servlets, Struts, jQuery and Glassfish to show the configuration of the software.
- To store data in Mysql.
- To check code quality with PMD.

**Environment:**

master shaper, jsp, struts, jquery, uml, servlets, junit, glassfish, hibernate



**Project:** Financial Dashboard  
**Company:** General DataComm  
**1 year**

**Description:**

- This project is to give some tools to sell department, this tools was creating simulators (mortgage, car etc.), and ensure calculations and accountable estimations.

**Responsibilities:**

- I designed and built several components like credit simulator and accounting estimations.
- I was responsible for all of the extensive chart rendering and interaction architecture.
- I did the website in JSP, Struts and JQuery in Glassfish server application.

**Environment:**

jsp, struts, jquery, uml, servlets, junit, glassfish

**Project:** WallStrong  
**Company:** General DataComm  
**3 years**

**Description:**

- This project was created in visual studio fox pro and the client request an update but the software to a new technology, the migration was in java, the system collect information about the network like SSH connections, ftp connections and other that use transfer files.

**Responsibilities:**

- To build a web user interface over JSP, Ajax, Javascript and CSS in order to show data in line charts and bar charts about the protocols of the network.
- To export data in excel format and CSV
- To store information in Mysql.

**Environment:**

linux, glassfish, jsp, java, mercurial, mysql, javascript, ajax

**Position:** JR Developer  
**Company:** Network services  
**Nov 2007 – 2009**

**Description:**

- I didn't have a project, I was learning to build web systems, my mentors and coworkers help me to create software, my first language was PHP, I did the corporative websites of the company (around 4 or 5) and I create a small software to store the date when some update happened in e-mexico project.

**Responsibilities:**

- Corporative websites

**Environment:**

windows, apache, mysql, php, java

**Position:** Technical Support and Developer

**Company:** Network services

**May 06 – Nov 07**

**Description:**

- Diagnose and troubleshoot software and hardware problems and help customers to install applications and programs. Technical Support Engineer responsibilities include resolving network issues, configuring operating systems and using remote desktop connections to provide immediate support.

**Responsibilities:**

- Fix network problems.
- Support email server.
- Create bash files to monitor process of the servers.
- Attend users.
- Format and Install windows SO.
- Create corporative website.

**Environment:**

windows, apache, mysql, flash, java

**Imagen y Creatividad JR Graphic Designer**

**2000 - 2001**

**Description:**

- JR Graphic Designer in small printer, my responsibilities were to draw in corel draw 8, color separations, creation of negatives for prints, design of flyers and silkscreen