

## Jesus Bianco (Toronto, Ontario).

**Application Architect, team lead, Java-PHP-Swift senior developer and DevOps.**

Highly motivated geek, with plenty of leadership skills and passion to bring to the table.

**I have an app on Apple's App Store (iOS) called: 8BallTracker**

**I am Canadian and Italian citizen.** I am incorporated since 2012 on Ontario, Canada.

This resume was updated on July 2019, get a copy of this resume online

on Microsoft Word format: <http://yisu.net/resume.doc>

or on Adobe PDF: <http://yisu.net/resume.pdf>

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**Languages:** Spanish, English, and basic knowledge of French

I have solid experience in architecture of applications/solutions and Internet content development. I have led groups of developers, teams made up between 2 to 7 people. I have strong working experience with Web (frontend and backend), application frameworks, AES and RSA Encryption, SDKs, web services / micro services, RESTful APIs, relational databases and document-oriented databases using single node server and clusters. I also have worked with message queues, e-commerce, home banking and payment systems, transaction management systems, firewalls, remote connectivity and network routing, virtual private networks, virtualization and automated provisioning, Dockerization of applications, dynamic deployments and orchestration. With knowledge in servers and workstations: UNIX/Linux, Apple macOS X, Microsoft Windows, and System i (aka AS/400). Around 25 years of experience in software engineering.

I have developed complex and efficient information systems for high traffic apps and websites, as well as Intranet and Internet solutions. In the Era of Internet of things (IoT) I am familiar with Raspberry Pi(s) and BeagleBone(s). Adding Wi-Fi hotspot, Bluetooth LE, 4G and GPS support to be used on automobile (cars). Experience on Ethereum blockchain, smart contracts and Java web3j library, proof-of-work (PoW) and Proof-of-authority (PoA).

### **Education:**

Computer Science Bachelor Degree. December 1999. Top 5 of the class (Class of 60 students).

Instituto Universitario de Nuevas Profesiones, Caracas - Venezuela

### **Courses:**

1) Fundamentals of the Java Programming Language (SL-110), February 2005.

2) Java Programming Language (SL-275), March 2005. Sun Microsystems, Caracas - Venezuela

My full resume is around 9 pages long, I am listing on this one the 2010-2019 years to keep it short, for the list of old my experiences/jobs, download the full resume online:

on Microsoft Word: <http://yisu.net/full.doc>

on Adobe PDF: <http://yisu.net/full.pdf>

**References will be provided upon request and after job interviews.**

## Some of the technologies I have worked with over the years:

| Java/J2EE, frameworks and Application Servers        | First time used | Average years, levels of proficiency |
|--|-----------------|--------------------------------------|
| Java 1.3 - 1.8 aka Java 8, my code runs on Java 11   | 2005            | > 12 years (Advanced)                |
| Spring Boot (2017), Spring MVC (2011)                | 2017 / 2011     | > 2 years (Advanced)                 |
| Gradle v4.x and v5.x                                 | 2017            | 1.5 years (Advanced)                 |
| Thymeleaf Java template engine                       | 2017            | > 1.5 year (Advanced)                |
| Java Server Faces (JSF), 2.x, PrimeFaces 3.x/4.x     | 2013            | 1 year (Intermediate)                |
| Apache Tomcat App Server, 6.x - 8.5                  | 2007            | 7 years (Advanced)                   |
| IBM WebSphere App Server, 5.x - 7.x                  | 2007            | 3 years (Advanced)                   |
| Apache GlassFish App Server, 3.x - 4.x               | 2013            | 2 years (Advanced)                   |
| JBoss/ WildFly Application Server, HornetQ,          | 2015            | > 2 year (Advanced)                  |
| JBoss Keycloak - single sign-on, identity management | 2019            | > 6 months (Intermediate/ Advanced)  |
| Apache Ant & Apache Maven                            | 2006            | 4 years (Advanced)                   |
| Hibernate ORM Framework: 3.x, 4.x, 5.x               | 2011            | 2 years (Intermediate/Advanced)      |

| PHP technologies and frameworks            | First time used | Average years, levels of proficiency |
|--|-----------------|--------------------------------------|
| PHP versions 3.x, 4.x, 5.x and 7.x         | 2000            | > 15 years (Advanced)                |
| PHP Slim 3 Framework                       | 2016            | > 1.5 year (Advanced)                |
| PHP Symfony Framework 1.x-3.x              | 2009            | 2 years (Advanced)                   |
| PHP CodeIgniter, Modular Extensions (HMVC) | 2013            | 2 years (Advanced)                   |
| Zend PHP Framework,                        | 2015            | 1 year (Intermediate)                |
| Yii Framework                              | 2015            | > 1 year (Advanced)                  |

| Relational databases                                 | First time used | Average years, levels of proficiency          |
|--|-----------------|---|
| MySQL 3.x, 4.x, 5.x (Administrator on all platforms) | 2000            | > 18 years (Advanced)                         |
| <b>MySQL Cluster 7.x in-memory database.</b>         | <b>2018</b>     | <b>&gt; 9 months (Intermediate/ Advanced)</b> |
| <b>Percona's MySQL XtraDB and Mongo Clusters</b>     | <b>2016</b>     | <b>&gt; 1.5 year (Advanced)</b>               |
| PostgreSQL 8.x, 9.x (Admin on Linux & MacOS X)       | 2007            | > 4 years (Advanced)                          |
| Oracle Database 8.x, 9.x, 10.x (Admin on Linux)      | 2006            | > 4 years (Advanced)                          |
| IBM DB2 10.x (Admin on System i)                     | 2011            | > 2 years (Advanced)                          |

| Frontend technologies                           | First time used | Average years, levels of proficiency |
|---|-----------------|--------------------------------------|
| HTML 3.2, 4.x and HTML 5                        | 1995            | > 20 years (Advanced)                |
| JavaScript                                      | 1996            | > 10 years (Advanced)                |
| Cascading Style Sheets/CSS, 2.x, 3.x            | 2004            | > 10 years (Advanced)                |
| jQuery, jQuery UI, Ajax and JSON, XML           | 2009            | > 8 years (Advanced)                 |
| <b>VueJS v2</b> , Angular v2, NodeJS, PM2, Yarn | 2019            | > 6 months (Intermediate/ Advanced)  |
| Bootstrap Framework 3.x, 4.x                    | 2016            | > 1 year (Intermediate/Advanced)     |

| Relevant technologies                             | First time used | Average years of experience        |
|---|-----------------|------------------------------------|
| Eclipse Mosquitto and Erlang MQTT Broker (MQTT)   | 2017            | > 1 year (Advanced)                |
| Apple's Swift, versions from v1 to v5.            | 2015            | > 2.5 years (Advanced)             |
| Apple Xcode, Storyboard, Auto-Layout, CocoaPods   | 2015            | > 2.5 years (Advanced)             |
| Apache web server/httpd, versions 1.x, 2.x        | 2000            | > 20 years (Advanced)              |
| LINUX (Red Hat, CentOS, Fedora, Ubuntu, Debian)   | 1996            | > 20 years (Advanced)              |
| Store Procedures (PL-SQL, SQL PL)                 | 2005            | > 6 years (Advanced)               |
| SubVersion (SVN)                                  | 2006            | > 7 years (Advanced)               |
| GIT (VCS), Large File Storage (GIT LFS)           | 2013            | > 3 years (Advanced)               |
| VirtualBox, vmWare, Parallels (Virtualization)    | 2006            | > 10 years (Advanced)              |
| Vagrant, version 1.7 – 1.9.x                      | 2016            | 1 year (Advanced)                  |
| Ansible (automation engine), version 2.x          | 2016            | 1 year (Advanced)                  |
| Docker and Docker compose, building my own images | 2017            | 2.5 years (Advanced)               |
| <b>Kubernetes (K8s)</b> , Ingress, Rancher        | 2017            | > 1.5 year (Intermediate/Advanced) |
| Jenkins automation server                         | 2016            | 1.5 year (Advanced)                |

## Work experience:

**Company:** Alert Driving / Fleet Defense

**Title:** Application Architect, team lead, senior developer and Dev Ops.

January 2019 Present (Contract role)

<https://www.fleetdefense.com/> and <http://www.alertdriving.com/> (over 60 people)

The company utilizes multiples solutions/software and database engines, around 7 application we use on the daily basis, I have been dockerizing the applications. The technologies of those applications include: Java/J2EE “Keycloak and enterprise service bus (ESB)”, PHP v5.6 and v7, NodeJS v8 and v10; Percona’s MySQL XtraDB Cluster and Percona’s MongoDB on a cluster fashion/ replica set. I have been implementing some best practices to improve the development process, QA and deployments, introducing to the company the power of Jenkins, Docker and Harbor. One important software the companies uses is HT2 Labs' Learning Locker; I was able to migrate the Learning Record Store “LRS” software tuning up Mongo’s Cluster, upgrading the NodeJS application stack and creating a proprietary Docker image of the software. I have planned and supervised the creations of Jenkins jobs to have refresh of databases, daily backups. I have improved the sanitization of production data (removing sensitive information) to be used on QAs environments and development.

As one of the Architect and Senior Developers of the company I have broken-down the systems into components, the component interactions and interfaces, the technologies and resources to be used in a new project we are building. I have run benchmarks between Java and NodeJS, also between MySQL and MongoDB, helping the CTO with the planification of the new project and helping to take the right decision when choosing technologies. Because we have multiple applications, docker images and environments, I have created a web solution to help with the deployment process and see where we at on Production vs QA vs Dev. The software is able to push the right docker image to our environments or rollback if it is necessary. I have run some PoC to validate how easy would be to deploy an iOS native app using Apache Cordova/PhoneGap or develop an iOS native using Swift.

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**Company:** NXM labs

**Title:** Application Architect, team lead and senior developer.

August 2017 - January 2019(17 months - Contract role)

<https://www.nxmlabs.com> (over 25 people)

As the Architect of the company and focus on the automobile project which involved Sprint Network, I performed the design, analysis and development of software that communicates from OBD2 devices to the NXM Backends using HTTPS/MQTT protocols. The device is an OBD2 dongle created by NXM which runs Linux, the device has Wi-Fi hotspot, Bluetooth LE, 4G and GPS. The software written in Java 8 using Spring Boot allows to perform some features as: collecting summarized car telematics data, remote retrieval of vehicle status, vehicle tracker, geofencing, find my car, remote updates over-the-air (OTA).

I have designed and implemented 3-tier architecture environments: development, QA, production. I have installed, configured and performed maintenance on multi-nodes MySQL Clusters, one cluster per environment.

I have implemented a scalable microservices architecture on 5 backends, those backends will communicate to each other implementing RESTful APIs, using Spring Boot running on Docker containers, some of those backends will be publishing and subscribing to MQTT topics to interact with the cars. Some of the backends needed to have user interfaces (UIs), then I implemented some dashboards using Thymeleaf and Bootstrap.

I have created some smart contracts and using the Web3j library I have deployed sensitive information to our Blockchain (PoA), where depending of the sensibility level of the information, the data will be encrypted using AES algorithm before deploying to the Blockchain.

As team lead and team player, I have been providing guidance and coaching to intermediate-junior developers with the objective of help achieving the goals set by management. I have supervised the mobile apps development, established the security protocols to be used between apps and backends, using public key infrastructure and adding SSL Pinning to the mobile apps.

**Company:** Enterprise Rent-A-Car / CarShare division

**Title:** Senior Software Engineer

October 2016 - June 2017 (8 months - Contract role)

<https://www.enterprise.com> (over 90 K people)

Daily Scrum meetings, review of Jira tickets and use of kanban boards. Enhancements on the Vagrant/VirtualBox environments, creating new images from scratch for CentOS and Ubuntu, implementing Ansible in order to provisioning local servers and virtual machines. Preparing the ground to migrate from PHP 5.3 to 5.6 for some legacy systems. Coaching intermediate-junior developers, transferring knowledge and making a positive and productive work environment.

Setting up a new Server and other Web Server to help with the load of the traffic (Web traffic and APIs on different servers) lowering the server's load of the biggest instance for the CarShare division. As a Senior Developer, I improved the End of Month/EOM that was taking 84 hours to process, after I **added some multi-processing / multi-tasking logic**, the End of Month process now takes just 12 hours.

Improving the source code especially when generating the corporate accounts invoices from 25-30 minutes to 5 minutes. Dip a toe in the water with J2EE, Gradle/Spring Boot for RESTful APIs (Micro services) using Docker containers.

**Company:** Riavera Corporation (Personas, Peeks, Telebuy)

**Title:** Senior Web and Mobile Developer

June 2015 - October 2016 (16 months, 20+ people - Permanent role)

<http://www.personas.com> <http://peeks.com>

Peeks, a live-streaming social e-commerce platform, which has been active developing in the recent months, aimed to launch on summer 2016. As lead developer, I was focused on the backend and supported the CTO with some architectural decisions and strategies. I created over 80 RESTful APIs using SOA/Micro services. Also, I helped with the development of some modules of the iOS app using Apple's Xcode & Swift. Coaching the mobile team about interaction between mobile and backend, responsible of deploying code to production, and taking the lead with the CTO was on vacations. Familiar with the setup of Wowza Streaming Engine Media Server, bitrate, codecs, formats.

Personas, is all-in-one social network that allows to separate your contacts with multiple profiles for enhanced privacy, share posts to all your chosen social media accounts (Facebook, Twitter, Instagram) and enjoy many advanced photo editing features. I have developed many modules using RESTful APIs, SOA/Micro services for Personas backend and frontend.

Telebuy, an in-house payment processor wrote in J2EE, EJB 2.x and 3.x, I fixed some minor bugs and do some maintenance from time to time.

**Company:** YTZ International

**Title:** Senior Web and Mobile Developer

September 2013 – June 2015 (20 months - Permanent role)

<http://www.ytz.com> (20+ people)

Automation of complex business processes of the company. Familiar with Agile software development, stand-up meetings, SCRUM, Jira/Kanban boards.

Responsible for the development of complex tools using the PHP framework CodeIgniter and its modular extension HMVC. This involved heavy JavaScript and jQuery manipulation and validation. Server-side processing with PHP, SQLite and MySQL databases. Calls to other systems of the company based on APIs and some Web Services.

Creation of a module to handle the database of domains of the company (over ten thousand domains). Performing WHOIS using the APIs: WhoisXmlAPI, RoboWhois or DomainTools. Generating reports in CSV files and modules that import data using CSV files to our system, bulk tools.

I developed a Queue in order to check for records to be processed. For each process, we are parsing the data, comparing the data against the databases, performing rsync's of files between servers, replacing domains, calling APIs and notifying via e-mail about the status of the run. Developed a lot of automation for the complex business core of the company.

I have developed a few WebApps in order to simplify daily tasks and having the possibility to call Web Services / Micro services (RESTful APIs) from a smartphone or tablet.

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**Company:** Jibestream.com

**Title: Senior Web and Mobile Developer**

September 2012 – August 2013 (one-year contract)

<http://www.jibestream.com> (15+ people - Contract role)

Developed the Toronto Pearson's Mobile/Desktop Digital Terminal Maps from scratch. I created an entire solution allowing uploading of the maps, parsing of SVG images (vector maps), storing the result in an Oracle database and preparing the data for retrieval from the website. Also, I created a CMS that allows an admin-user the mapping of items on the database of amenities (coffee shops, restaurants, washrooms, elevators, etc.) Because the maps are vectors (SVG) the website will recognize and adapt (Adaptive Web Design) if the user is visiting from a mobile/tablet browser or from a desktop browser and the layout will change according to the resolution of the screen, plus if the user rotates the device from portrait to landscape the page will refresh with the new layout.

Coaching other developers, transferring knowledge sessions and contributing with a productive environment. Work close with the Architect of solution to satisfy the complex requirements of the projects.

The website has a lot of features, from searching, zooming, sharing of maps, filtering which items should be shown and providing details of the item when it was clicked / touched. I also installed the necessary software/packages like Linux OS, different databases, Apache and PHP, GlassFish Application Server, remote connectivity (SSH), parsing of Logs files.

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**Company:** Domainer Inc.

**Title: Senior Web Developer, e-commerce Architect**

July 2012 - September 2012 (3 months contract)

<http://www.openapps.com> (5 people - Contract role)

I implemented the PayPal's Adaptive Payments (RESTful APIs), plus the development of modules including Sign-In, user creation and maintenance, uploading of files, parsing huge text files (CSV, XML, JSON), optimizing queries on the Database side, E-Commerce shopping cart, transaction management and image manipulation. Using a proprietary PHP framework based on CakePHP.

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**Company:** Scotiabank / Scotia Capital (TAG division)

**Title: Senior Software Developer**

November 2011 – April 2012 (6 months - Permanent role)

<http://www.scotiabank.com> (75,000 employees worldwide)

As part of the Application Development in supporting Scotia Capital Derivatives business lines, I have worked on a team that is responsible for the effective and efficient development, implementation and support of mission critical, on-line, real time financial trading, risk management or decision support programs or application systems of medium to high complexity; contributing to deliverance of technology application services to the department's clients to meet their needs.

I resigned from the bank in order to return to my area of expertise which is web application development and move forward to smartphones and tablets developments using web apps and native apps.

**Company:** Oceanex Inc.

**Title:** Java Architect and Senior Software Developer

April 2010 – October 2011 (18 months - Permanent role)

<http://www.oceanex.com> (140 people)

- Extensive refactoring and restructuring of our corporate intranet including the removal of EJB 2.1 code, resulting in pronounced performance improvements.
- Incorporated APIs including Google Apps, Microsoft LDAP and Web Services to access and modify external data used in multiple modules of our intranet.
- IBM WebSphere Application Server and AS/400 administration including patching and migration for version 6 and 7 of WebSphere Application Server.
- Maintenance of some existing Web Services and creating new ones using RESTful APIs.
- As Java architect of our company's back office solution "Client Zone" I:
  - Implemented the Struts 2 framework, set up actions, interceptors, tags, servlets and JSP using the full power of Web 2.0 technologies
  - Created database schemas, table relationships, indexes and constraints, adding Hibernate to the list of tools we used.
  - Built a security module to allow customers to create new users with limited profiles and assign accessibility privileges based on established rules.

**Company:** Twist Image

**Title:** Senior Web and Software Developer

September 2009 – March 2010 (6 months - Permanent role)

<http://www.twistimage.com> (80 people)

- Creation of shell and PHP scripts in order to make an Adobe AIR file (package) in real time for the fall Campaign 2009 of Dairy Farmers of Canada. Plus, I designed, developed and implemented an XML generator in PHP, which grabs data from the database, prepares the content and generates/outputs to XML files.
- For a TD Canada Trust Campaign, I designed, developed and implemented a Parser using PHP's XML libraries, in order to connect to remote sites (vendors), grab RSS Feeds and parse the files, the RSS Feed have URLs of images, which I resize, rescale and convert from one format to another.
- I collaborated on the development of the project for the TD Canada Trust, campaign "What's your deal?" using the framework Symfony for PHP, we simulated some features of Facebook such as, post comments, do the likes, delete comments, add URL to comments, etc.
- I did some maintenance and de-bugging for the Johnston Group ([johnstongroup.ca](http://johnstongroup.ca)), using the framework Cake for PHP.
- For the new version of Dairy Farmers of Canada ([getenough.ca](http://getenough.ca)), under the module of the contest for The Dairy Dash game, I was assisting some team members and I was the main developer for the creation and validation of forms and sign-on module, I implemented captchas, validation, storage and data retrieval from Database, using the framework Symfony for PHP and MySQL databases.