

Marco Antonio Basto Rodríguez Computer Systems Engineering

email: mabaro13@yahoo.com phone: 99 31 26 89 10

EXPERIENCE - SUMMARY

I have applied my experience and abilities in Information Technology area to contribute to company's commitments while I continue developing myself professionally.

PROFESSIONAL EXPERIENCE

Position Senior software Engineer **Period** August 19th 2019 - Actual

Company HCL

Summary Analysis and design of web services using Java.

Activities • Analysis of existing web services to improve time response.

Fix of bugs found in Java code.

Tools Java, IntelliJ, Gitlab.

Position KE (knowledge engineer, Java Developer) **Period** September 1st 2016 – June 28th 2019

Company Dextra - HPE

Summary Modelling of hardware and software products that the company sells through web

configurators.

Activities

 Java and JavaScript development in conjunction with the programming language owned by the company. (called modelling of products).

• Software development of tools to integrate all of the team's tasks and assign them to the adequate KE considering level of knowledge and complexity of the task.

Resolution of tickets (bugs).

Tools Java (backend), JavaScript, HTML, proprietary programming language (similar to Java due

to OOP), VBScript (Excel).

Position Analysis and data exploitation of planning area (new oil wells)

Period September 2014 – Abril 2016
Company PEMEX. Villahermosa, Tabasco.
Summary Software development to perform

Software development to perform data analysis to determine profitability of new oil wells considering daily production, production cost and cost of oil barrel among other

variables to define new oil wells.

Activities

 Enhancements to Economic Evaluation Models in order to determinate in a faster way the profitability of oil wells. The original Economic Evaluation Models were using only Excel formulas and a lot of manual information written by the Petroleum Engineer prior to start the evaluation. The improvement was done using Excel files in conjunction with a VBA development and a MS SQL database. The MS SQL database was populated after an ETL process was applied to get information from different data providers.

- Automation in the integration of data from different factors and job areas such as investment, oil and gas production, operating costs and physical activities of oil wells. For this integration ETL was required because of the use of heterogeneous databases (MySQL, MS SQL, Access) from every of the job area. This ETL was implemented developing a java application and the load of information was done in a local MS SQL database.
- Promptness in conclusion of analysis about integrated data (investment, oil and gas production, operating expense, physical activities) to identify variations and/or adherence to Pemex commitments.
- Development of requirements to collect information from pressure sensors (data
 is stored and given from different providers). Once the software was developed
 and implemented, the integrated information is analyzed using a graphic that is
 generated to a slide automatically.
- Software development that integrate information of quarterly periods to analyze the behaviour of the movements of drilling equipment and suggest strategies to increase oil and gas production.
- Database standardization from different providers to integrate and analyze oil well status.

Tools

VBA, Autolt (Windows interface automation), Access, and Microsoft SQL (database design).

Position Period Company Summary

Analysis and data exploitation of budget area

March 2013 - July 2014

PEMEX. Villahermosa, Tabasco.

Through ETL and application development the data analysis is performed to determine budget required for new oil wells and to support the existing ones. Adapt the distribution of economic resources in order to satisfy unforeseen requirements of oils wells.

Activities

- Automation to apply ETL on SAP system about accounting moments.
 - ETL applied: the source of information is the SAP system then using SAP scripts the information is extracted for every of the accounting moments and stored in Excel files (because of authorizations restrictions it was the only format target allowed). Once the information was in Excel files (7 Excel files, one per each accounting moment) the next step was to develop an .NET application to extract the information from every excel files to analyse, summarize and transform it. With previous steps executed the processed information was stored in a local SQL 2012 database.
 - A second ETL process was required over the stored information in SQL 2012 thus the functionality of the application was extended. Extracting information from SLQ 2012 database, to summarize and integrate it (using stored procedures) and loading it into Excel file. With the information stored in the Excel file the script automatically creates all the worksheets and pivot tables required by the budget area. The script also used the information stored in the Excel file to automatically create slides for Power Point with tables and graphics required by the budget area.
- ETL and software development facilitated:

- o Daily analysis of accounting moments doing agile tracking of realized commitments of cash flow and comparing them with cash budgeted.
- o Fast data analysis of accounting moments due to automatic generation of Excel pivot tables.
- o Efficient and organized budget of new oil wells because of data integration with drilling area through a software development.

Tools

SAP (jobs and scripts programming and as data source), VBA Excel 2010 (macros to analyze information and to generate automatically pivot tables), SQL 2012 (integration, analysis and data exploitation), VB .NET (software development)

Position Period

Data Analyst

Company

October 2011 - March 2013

Kash Casino. Villahermosa, Tabasco.

Summary **Activities**

Track and analysis of movements given by gamers to determine veracity of betting.

- Enhancements to the review process of prize voucher given to players according to their accumulated points.
- Generate historical auditing reports for data analysis.
- Analysis of informatics processes to improve services given to customers.
- SQL Server data backup and development of stored procedures and triggers.
- Windows 2003 Server administration to track services required to maintain the communication between SQL Server and Casino's games.

Tools

Microsoft SQL Server, Windows 2003 Server

Position

Evaluation of abandoned oil wells

Period

Abril 2011 - August 2011

Company

PEMEX. Villahermosa, Tabasco.

Summary

Physical inspection of abandoned oil wells and their location to collect information to program maintenance. Abnormalities (oil and/or gas leak) found in abandoned oil wells are reported as soon to create an emergency plan.

Activities

- Elaborate a process to evaluate abandoned oil well state to assign priorities and create a maintenance plan.
- Software development (database and web) to track the maintenance plan of abandoned oil wells according to priorities. Development software used: ASP and MS
- The collected information about abandoned oil wells and their respective maintenance plan is presented twice a week to the oil well's coordinator.

Tools

SAP, MS Access

Position Period

Quality leader systems

January 2007 - August 2009

Autonomous University of Guadalajara. Guadalajara, Jalisco. Quality assurance in software development

Company Summary **Activities**

Quality assurance in software development. Static tests applied at analysis and design phases, dynamic tests applied for development e implementation phases.

- Constant feedback with software development team to ensure tracing of user's requirements.
- Ease of use applied to desktop applications and web applications according to standards.
- Ease of use assurance through foreign staff and customers to collect feedback.
- Continue interaction with customers to guarantee application's requirements.

Tools

osrmt to manage user's requirements and use cases; Testlink to manage execution and tracking of test cases and issues found.

Position

Project leader

Period Company January 2005 - January 2007

Summary Activities

 $\label{lem:condition} \mbox{Autonomous University of Guadalajara. Guadalajara, Jalisco.}$

Compliance with the requirements and dates agreed with the administrative

- Planning and development control of new software systems required by chief academics.
- Verification and validation applied to the requirements of new software systems requested.
- Due to planning and development control the issues found by customers were reduced.
- Management of software development team.
- Management and support for Java and ASP servers.

Tools

Java, ASP servers, ASP pages

Position

Programmer Analyst

Period

January 2004 – January 2005

Company Summary

Autonomous University of Guadalajara. Guadalajara, Jalisco.

Summary Activities Software development of projects required by chief academic.

- Software development required by academic officers to track teacher's performance.
- Database design using MS SQL Server (entity-relationship model).
- Development using MS SQL Server (stored procedures, triggers).
 □ Helpdesk for academic chiefs.

Tools

ASP, HTML, JavaScript, MS SQL Servers, CSS.

Position
Period
Company

Software Test Engineer July 1998 – July 2002

IBM

Summary Activities

Development and execution of test plans

- Responsible of test plan design and execution for AS/400 platform applications.
 Assessment progress and effectiveness of the test, measure the test plan and test execution.
- Rational Visual Test to develop and to execute test cases for Windows applications.
 Assessment progress and effectiveness of the test, measure the test plan and test execution

- Responsible of test plan design and execution to approve Lotus Note's standards for applications developed under this environment to get ASCA certification. Generating documents required by ASCA certification.
- Software development for IBM internal applications using Java on JBuilder IDE.
- Fix of bugs of IBM internal applications using Java on JBuilder IDE.

Tools Rational Visual Test, JBuilder, AS/400

LANGUAGES

English: Intermediate

Spanish: Native

TECHNICAL EXPERTISE

Programming	
Language	Experience
Java	10
ASP	4
HTML	7
JavaScript	5
.NET	2

Database	
Database	Experience
MS SQL	7
MS Access	4
Database design	7

CERTIFICATIONS & PROFESSIONAL TRAINING

1998–2000 Autonomous University of Guadalajara

Guadalajara, Jalisco

Master's degree in computer sciences. Certificate.

1994–1998 Autonomous University of Guadalajara

Guadalajara, Jalisco

Computer Systems Engineering. Certificate.