



Computer Engineer

Carlos Martín Sánchez

(+34)679811598 ☎
carlosvin@gmail.com ✉
carlosvin in

Part I

Professional Experience

1 Isban

1.1 IT Consultant. “ION Swaps” Project (2012 Jul. - Present)

Project Description

“ION Swaps” consists of a set of custom components working in ION Market View Platform¹. The main features of components are: automated trading, market making, price taking, financial instruments translation, live statistics generation (trades/orders).

Tasks

- Developing in-house ION components (C++, Java). The development process consists of iterations through the software lifecycle phases.
- Managing continuous integration and component delivery. Review quality of software. Verifying software dependencies.
- Creating help tools to perform integration tests and extract relevant information from environment (C++, Java, Python).

Technologies & Platforms

- Programming languages: C++, Java, Python, shell.
- Continuous integration: Jenkins.
- Project build and deploy:
 - Java: Apache Ant.
 - C++: Autotools and Make.
 - Implanting new system: Gradle.
- Analysis and design (UML).
- DB: Java DB (Derby), ObjectDB, SQLite.
- Programming IDE: Eclipse, PyCharm.
- Unit testing: CppUnit and JUnit.
- Version control system: CVS.
- Environments: Linux (Red Hat/CentOS) and Windows.
- Other frameworks and APIs:
 - Java: Spring, Log4J, JMS, JAXB, Xstream.
 - C++: Poco.

2 Sociedad Estatal de Loterías y Apuestas del Estado (Selae)

2.1 Software Engineer. “AGIL” project (2007 Oct. - 2012 Jul.)

Project Description

AGIL² is the new Spanish Lotteries system; the project starts in 2007 and it was fully deployed on first quarter of 2014.

¹More information about this trading platform: <http://iontrading.com/>

²Aplicación de Gestión Integral de Loterías (Integral Management Systems for Lotteries)

Tasks

I was involved in requirements management, analysis, design, development, unit testing and integration testing.

Systems that I developed were: distributed systems (communications channels manager, load distributor, client-server architectures, etc.), communication protocols and in-memory data models.

Technologies & Platforms

- Programming languages: C++, Java, Python, shell.
- Continuous integration: Jenkins.
- Project integration management: Maven.
- Requirements management: IRQA.
- Analysis and design: IBM Rational Software Architect.
- Programming IDE: Eclipse and IBM Rational Software Architect.
- Unit testing: CppUnit.
- Version control system: Subversion.
- Environments: Linux, AIX and HP-UX.
- DB: Oracle

3 UCLM at Alarcos Research Group

3.1 Contract R&D. RW3 (April 2007 - September 2007)

Project Description

RW3 is a CASE tool focused in reverse engineering and restructuring process.

From a database schema, RW3 gets a meta-model, then you can modify it and generate new source code.

Tasks

Creation and integration of a new UML modeling graphic tool to modify the obtained meta-model.

Technologies & Platforms

Eclipse (analysis, design, developing), Java, Piccolo2D (2D graphics), Swing (GUI), JUnit, Subversion, Linux and Windows.

3.2 Contract R&D. TestOOj3 (December 2006 - March 2007)

Project Description

TestOOj3 is an automated unit test generation tool for Java applications.

Tasks

Adding new features to the tool:

- Unit test generation from UML state machines to model the behavior of class instances.
- Graphical tool integration to draw UML state machines.
- Importing/Exporting state machines in XMI format.

Technologies & Platforms

Eclipse (analysis, design, developing), J2EE, Piccolo2D (2D graphics), JUnit, Subversion, Linux and Windows, Microsoft SQL Server.

Part II

Education

M.Sc. in Computer Engineering, UCLM, Spain ³.

³You can find more information about Engineer's degrees in Spain in http://en.wikipedia.org/wiki/Engineer's_degree#Spain

4 Certification Courses

Course Name	School
C++	Criteria
IPv6	L&M Data Communications
Programming Web Apps with Python: ZOPE	UCLM
JAVA Technology	CLE Formación
Multi-platform 3D Game Development	UCLM
Introduction to the Design of Interactive Computer Applications with Flash	UCLM

5 Languages

Spanish first language.

English conversational.

Part III

Personal projects

- I developed a content management system written in Python with Django framework. The presentation layer was made in HTML5+CSS3. CMSdj (<https://bitbucket.org/carlosvin/cmsdj>).
- I'm learning NoSQL databases (MongoDB) working together with other web frameworks (Flask).
- Learning other technologies directly related with Java, such as Scala and Android.
- Researching about other systems to support continuous integration (travis-ci and TeamCity by JetBrains) and continuous delivery (Go by ThoughtWorks).
- I have other projects and code snippets in: github.com/carlosvin, bitbucket.org/carlosvin, stackoverflow.com/users/1421059/carlosvin.
- I'm researching about the creation mobile and web applications with Dart lang + AngularJS.
- More info at: github.com/carlosvin and [stackoverflow user carlosvin](https://stackoverflow.com/users/1421059/carlosvin).