



SW Engineer

Embedded SW architect

Alfonso Trigo
+5 years of experience
1982

EXPERIENCE SUMMARY

I have developed the most of my career in the automotive and aerospace sector. Starting 7 years ago as a developer during my internship in Airbus Helicopters and continuing as a requirement analyst, SW QA engineer, team leader and finally SW architect, role that I hold at the present in CTAG Automotive. During all those years, I have been requested to assume the responsibility to lead different teams, task that I carried out with success by applying leadership without authority.



TECHNICAL ABILITIES

1- Beginner Academic , training only | **2 - Intermediate** Level 1 + small projects or internships **3- Advanced** Level 1/2 + project experience | **4 – Professional** Level 1/2/3 + wide professional experience
5 - Expert

PROGRAMMING		
LANGUAGE	LEVEL	VERSIONS
Java	3	J2SE; J2EE 6, 7
.Net	1	3.5, 4
PHP	2	4
Python	2	3.x
C/C++	1	N/A
HTML	2	5
CSS	2	2,3
DATABASES		
Oracle	1	9g
My SQL	2	5.7
Mongo DB	1	2.6
TOOLS		
Visual Studio	1	2010
Eclipse	3	
JetBrains/Pycharm/Android Studio	2	
GWT	3	
Office	4	2013
OPERATING SYSTEMS		
Windows	3	7, 10
Linux	3	RedHat, Ubuntu
MacOS	3	Catalina
OTHERS		
CanAnalyzer	3	V11
Enterprise Architect	3	V14



PROJECTS

Electrochromic glass control ECU – Embedded SW Architect

December 2020 until present

Context

Development of an embedded system based in S32K microcontroller for control and diagnostics of an electrochromic glass present in a premium platform of a leading OEM.

Main Activities

Define high level architecture
Define main functionalities
Hold technical discussions with the customer to define the scope of the work

Technologies

S32K, C, UDS, LIN, ASPICE, Jira, Enterprise Architect

Bootloader for embedded ECU – Project Manager

January 2020 to December 2020

Context

Development of a bootloader for a 2 processor ECU requested by main OEM. The scope of the work included the creation of system requirements and the implementation and verification of SW requirements following ASPICE methodology.

Main Activities

Plan and manage activities for development and verification teams
Technical discussions with OEM customer to define the scope of work
Report status and progress to customer

Technologies

Microsoft Project, C, UDS, LIN, ASPICE, Jira

Connected services validation – Technical leader

September 2018 to January 2020

Context

Set up a validation team specialized in connected services for the multimedia unit of a leading OEM. The project was carried out in the facilities that CTAG has in Romania and included the training of the new team members and their monitoring during 12 months.

Main Activities

Set up environment for a new team
Train and support team members
Supervise and report activities

Technologies

CANalyzer, BusMaster, PostMan, CAN, OBD, UDS, MQTT, Linux (Ubuntu)

In Vehicle Infotainment system validation – Team leader

September 2017 to September 2018

Context

Project for the validation at the system level of the connected services present in the multimedia unit of a leading OEM

Main Activities

Design strategies for the validation
Monitor and report validation activities
Maintain technical specifications for connected services

Technologies

CANalyzer, BusMaster, PostMan, CAN, OBD, UDS, MQTT, Linux (Ubuntu)

In Vehicle Infotainment system development – Requirement Analyst

February 2015 to September 2017

Context

Project for the development of an infotainment unit for a leading OEM with focus on the connected services. Inputs for the work were the customer specifications and the outputs were technical functional specifications.

Main Activities

Define connected services at the functional level
Write functional requirements

Technologies

UML, Microsoft Visio, Microsoft Excel, Enterprise Architect

Web Application – Intern developer

February 2014 to September 2014

Context

Update and upgrade a web application based in Google Web Toolkit.

Main Activities

Capture customer needs
Update obsolete functionalities
Implement new functionalities

Technologies

Java, SQL, Eclipse, GWT, GIT

**LANGUAGES**

A1/A2 Basic user; | **B1/B2** Independent user; | **C1/C2** advanced user

	UNDERSTANDING	SPEAKING	WRITING
Spanish	Native	Native	Native
English	C1	C1	C1
German	A1	A1	A1

**EDUCATION**

2015 (October)	Degree in Computer Engineering (University of Vigo, Ourense, Spain)
2015 (October)	Cisco CCNA Routing & Switching
2012 (July)	Erasmus Programme (Akademia Techniczno-Humanistyczna, Bielsko-Biała, Poland)
2008 (June)	Degree in Technical Computer Engineer with focus on Software engineering (University of Vigo, Ourense, Spain)