

Begoña PEREZ RODRIGUEZ

Work experience in 3D modeling 2 years  
and software engineering 6 years

## Computer Science Engineer / Computer graphics

### Education

2010 - Master of Science in Computer Science Engineering – Universidad Autónoma, Madrid

2015 - 3D Computer graphics design – ARIES school, Lyon

### Professional experience summarize

2019                    Schneider Electric – Front-end development, Angular 7  
2018                    Thales Alenia Space – Front-end development, Angular 5  
                             Air France – Front-end development, Angular 6  
2015–2017            3D Computer Graphic freelance  
2010–2014            Amadeus – Back-end development, C++

### Skills

Development	HTML5 / CSS3 / Bootstrap, JavaScript, TypeScript, JQuery, Angular Web Services, REST Databases SQL et noSQL (MongoDB) NodeJS C/C++, notions de C# et Java and Spring
Tools	Git, Mercurial, Jenkins, wireframing tools
Design and 3D	Photoshop, Illustrator, After Effects, 3ds Max, V-Ray, ZBrush, SketchUp, Meshmixer, Marvelous Designer, KeyShot, V-Ray
Others	Agile methodology

### Languages

French	: Fluent	Italian	: Intermediate
English	: Fluent	Spanish	: Native

## Professional Experience

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**From January 2019 – AVISTO – Front-end developer**

***Front-end developer Angular 7 at Schneider Electric – Carros, France***

Within Machine Solutions department I develop a Web interface to configure and watch an expansion module (Modicon TM3BC). I create the layout of the interface based on graphic chart of the company, using the committed graphical chart and Angular components provided.

The TM3BC module is used to distribute input/outputs of a logic/motion controller for industrial machines and also supplies power.

It is possible to connect up to 14 TM3 expansion modules (7 local and 7 remote or distributed), that include digital and analog I/O. They are connected to each other with a simple interlocking assembly mechanism.

The Web server interface redesigns a legacy product and allows customers not having a Schneider controller to use and configure the module. It is used to configure the communication settings and the values of the I/O and to watch their state, among others.

The interface is accessible from a workstation over a USB link for all existing references of the TM3BC (EtherNet/IP, CANopen, ModbusTCP connection protocols)

Any workstation supplying an USB (host) port and/or an Ethernet interface can connect to the Web server by using a Web browser respecting the HTTP standard and allowing JavaScript (ECMAScript 5). It is accessible from the most commonly used browsers by using the IP address or the hostname of the device, following the specified configuration. It is embedded in a device and is ready to be used, without any required setup process.

### **Technical environment:**

- Angular 7, TypeScript, HTML, CSS, JavaScript, REST API
- Git, ClearQuest, JIRA, Visual Studio, So Machine (Schneider)

**January - December 2018 – AKKA – Front-end developer**

***Front-end developer Angular 5 at Thales Alenia Space – Cannes, France – 2 months***

Within the avionics ground system pole, in the team in charge of the OPEN SCC (Satellite Control Center), helps the development of the Web client allowing the bidirectional communication between ground and satellite.

Using Web technologies such as Angular, REST, WebSocket Development and addition of features of the GUI to view and control commands sent and received by satellites.

**Technical environment:**

- Angular 5, Material Design, HTML5, CSS3, JavaScript, TypeScript, REST, WebSocket
- Git, Jenkins, Visual Studio, Jira

***Front-end developer HTML/CSS/JS at FredericM – Cannes, France – 1 month***

As part of the IT team of this company manufacturing and selling cosmetics, I was in charge of the e-commerce Web portal. Development mainly in Web technologies, including JavaScript, HTML, CSS. Bug fixing in ASP.NET C#.

Graphic redesign of some components and correction of problems of display of the site in particular to make it responsive for all the devices of the market before commissioning the site that month.

**Technical environment:**

- HTML5, CSS3, JavaScript, ASP.NET, C#, Visual Studio, Bootstrap

***Front-end Developer Angular 6 at Air France – Sophia Antipolis, France – 9 months***

Within the distribution division, development of the business applications portal for Air France staff, PaxTravel.

It is the redesign of the TravelDB portal using the technologies of the new stack (Java Spring 4, Angular 6).

HMI design support (UX / UI) with AMOs for existing screens on TravelDB as well as for new requirements. Interaction backend – frontend via REST services. Interaction backend PaxTravel with TravelDB via SQL queries Spring Data JPA and SOAP Web services (to recover the data of AMADEUS Altea that TravelDB enriches).

Design of the Confluence page for the application. Logo design proposals and icons. Angular migration 5-6.

**Technical environment:**

- Angular 6, Bootstrap 4, Material Design, HTML5, CSS3, JavaScript, TypeScript, API Rest
- Java on Eclipse
- Framework Struts, Hibernate
- Webservices
- Devnet (Jira, Bitbucket, Git, Bamboo, Confluence, Maven)

## 2015 –2017 Freelance 3D Computer Graphics

### *Freelance 3D jewelry modeling - Antibes, France*

Develop 3D modeling jewels from photos or drawings from the clients to be 3D printed.  
Designing customized jewelry to be 3D printed and casted in metal.

Website: [www.creabybego.com](http://www.creabybego.com)

3D printed jewels shop: <https://i.materialise.com/shop/designer/begogna>

- Help the client in the design of the desired 3D object.
  - Interpretations of the sketches and specifications of the client for the transformation in 3D object.
  - Analysis of the wanted materials to know the minimal measures needed for each part of the object.
- 3D modeling
  - Modeling the sub-objects in different programs according to the most adapted for each part.
  - Union of the separated objects in one to be accepted by the printer.
  - Creation of a shell if needed (instead of solid object).
- Verification and correction before printing.
  - Analysis of the measurements of the final object to check the feasibility in the chosen material.
  - Inspection to find errors that the printer could not interpret (superposition of faces, holes in the mesh ...)
  - Modeling corrections: after 3D printing and physical modification, such as polishing, rectification of the 3D model such as giving more volume to a relief.

#### **Technical environment:**

- SketchUp, 3DsMax, ZBrush, Meshmixer, Marvelous Designer, KeyShot, VRay,
- Photoshop, Illustrator, 3D printers

### ***Internship 3D Computer Graphics - Tridymaker - Antibes, France***

Modeling and texturing 3D objects for 3D printing. Processing and fixing 3D scanned objects (from a 3D scanner) to make them printable.

- Modeling 3D objects in a way they can be 3D printed (manifold, light enough in number of polygons...etc.)  
Texturing for the full color 3D printer.
- Correction of 3D scanned objects.
  - Files coming from a 3D scanner have capture errors that must be fixed for the printer to be able to read them.
  - Correction and adding the missing parts of the files (like the shadows that are not captured by the scanner)
- Translation of an article about 3D printing from English to French for their Website.
- Texturing of 3D objects.
  - 3D painting the models for color 3D printer.
- Adapting the colors of scanned objects.
  - Changing the colors to match those of the original objects (after comparing with first printed prototype), as screen and printed colors may differ.
  - Add color in the missing parts (those that had shadows and the scanner did not get)

#### **Technical environment:**

- 3dsMax, ZBrush, Meshmixer, Scanner Artec EVA, Artec Studio, 3D printers

**June 2010 – September 2014 – Aubay – Back-end developer**

***Software development engineer- AMADEUS IT GROUP – Nice, France***

Backend C++ development at the pricing department for the travel industry.

- Planning and sizing projects at developers' side.
- Technical design and implementation of new features, in C++.
- Coding the solutions in Web service and command line graphic interface modes.
- Client support for bugs in existing code in production.
- Modification and update of databases.
- Shell script writing for task automation (code validation, file creation...)
- Monitoring and configuration of the continuous integration tool and the version management tool.

**Technical environment:**

- Unix, STL, Boost
- Shell Scripting
- Continuous integration Mercurial, Jenkins
- XML, EDIFACT
- SQL
- SharePoint
- TPF
- Backend C++ sous Eclipse

**2009 – 2010 Internships in France and Spain**

**2009-2010 Internship Software development engineer – EUROPCAR – Madrid, Spain – 7 months**

Helping employees of the Information Systems department in their tasks. IT support service for the company's employees in real time.

Logs and backups control. Installation and configuration of IP phones.

**2008-2009 Internship Software development engineer – SERMEPA – Madrid, Spain – 9 months**

Software development and graphical interfaces creation for communication between the computer and Smart Cards.

- Graphical user interface development using Microsoft Foundation Class (MFC), a library that wraps portions of the Windows API in C++ classes.
- Icons design for the graphic interface using IcoFX.
- C applications and JavaCard applet development embedded in the Smart Cards to simulate several features.

**Technical environment:** Microsoft Visual C, JavaCard, JCOP, Eclipse SDK, VBA, Microsoft Excel, C, C++, SmartCard reader

**2008 Internship Software development engineer – EADS ASTRIUM SATELLITES – Toulouse, France – 3 months**

Evaluation and prototyping different solutions to improve the performance of a satellite embedded processor emulator (SPARC V8)

**Technical environment:** Linux, C, Assembler, JIT

**2006 Internship Software development engineer – CRL UAM-IBM – Madrid, Spain – 6 months**

Development of an application for a client-server database based in .NET technologies for free platforms.

**Technical environment:** Linux, .Net, Glade and GUI for GTK, Mono, C #

## Other trainings

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**2017: Full-stack JavaScript** – M2i, Mougins

**2014: Agile Scrum, Design pattern** – Amadeus, Sophia Antipolis

**2011: Advanced C++** – Evolution MM, Saint Laurent du Var

## Sports and hobbies

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**Hobbies:** sewing, knitting, handcraft...

**Sports:** aerial acrobatics, mountain bike, football, climbing, hiking... Latin dances.

Judo instructor for children (2010). Judo black belt 2nd DAN (2006).

## Abroad experiences

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Volunteer at a workcamp in Morocco (2009).

Erasmus at INSA Toulouse (2007-2008).

Summer exchanges in Ireland (2002), USA (2003), France (2000, 2001).