

### Academic Formation

- 2014–2015 **Master in Design and Development of Videogames**, *Universidad Politécnica de Cataluña*, Barcelona, Spain
- 2011–2012 **Master in Soft Computing and Intelligent Data Analysis**, *European Centre for Soft Computing/Universidad de Oviedo*, ECSC Scholarship for Academic Formation, Mieres, Spain
- 2006–2010 **Master in Computer Science, mention Artificial Intelligence**, *Universidad Centroccidental Lisandro Alvarado*, Barquisimeto, Venezuela
- 1998–2003 **Computer Science Engineer**, *Universidad Centroccidental Lisandro Alvarado*, Barquisimeto, Venezuela

### Complementary Formation

- 2012 **Web Application Development for E-Commerce with Magento**, CITIPA
- 2004 **Intermediate-Advanced SQL Server 2000 Course**, *Query Creation*
- 2003 **Management of Graphics Tools: CorelDraw 10 and Photoshop 7.0**, UCLA

### Professional Experience

- 2016–2023 **Senior XR Developer & Tech Lead**, *Visyon*, Barcelona, España,
- Team management and project definition.
  - Unity3D Senior developer.
  - VR Headsets: Oculus Quest (1, 2, Pro), HTC Vive Focus 3 (LBE), Pico XR.
  - Development and deploy WebGL applications.
  - Development of AR applications with Vuforia and ARCore.
  - CloudComputing with AWS.
  - Design and implement communication with REST APIs.
  - CI Pipelines with GitLab, GitHub.
  - Setup private NPM server with Verdaccio for internal tools available in Unity Package Manager.
  - Development and leadership of XR multiplayer projects, industrial simulators and metaverse.
  - Build of custom tools and automation components for Unity Editor.
  - Learn new knowledge needed for different projects and technologies.
- 2015–2016 **Senior Android Developer & Analyst**, *Genaker*, Barcelona, España,
- Development and maintenance of voice processing module in OpenSL (NDK).
  - Development of PTT application (Push-to-talk).
  - Git version control.
  - Multi-flavor Android Studio Project admin.
- 2012–2014 **Technical Director. Senior Developer**, *Clever Interactive Systems, S.L.*, Barcelona, Spain,
- *Tockit* Android application, mainly: Chats, Twitter, Recommendations Module, Image Match, Application Refactoring, Git Administrator and involved in the rest of the application.
  - XMPP Chat, multimedia elements (animations, audios, polls), shop for these multimedia items (SQLite in-app).
  - Image match system backend using OpenCV and C/C++.
  - Image match system in app using NDK and OpenCV.
  - Server administrator for image match server and TV signal capture server. Shell Scripting for tasks automation.
  - Design of the recommendation module backend and development of the app recommendation section.
  - Maintenance and expansion of the webservice (REST) that supports the application.
  - Design and implementation of a workflow to deploy the production webservice using Git.
  - Twitter integration in the app. Link the app to the twitter account, and twitter common tasks (send and search for tweets, retweet, reply, fav, follow).
  - Login with Facebook. Link the app to facebook, publish in facebook.
  - Server administrator of Amazon EC2 servers, load balancer, security groups, etc.
  - Basic continuous integration model using Git

- 2010–2012 **Freelance Projects**, *Actimedia, C.A.*, Caracas, Venezuela,  
 • <http://grupoferrara.com> (kitchen section), Frontend/Backend. *Outdated*.  
 • <http://neo-screen.com>, Frontend/Backend.  
 • <http://resimon.com>, Frontend/Backend
- 2011 **Contract for five months as Development Consultant**, *Inter C.A.*, Barquisimeto, Venezuela,  
 • Ending development of ticketing system for ferry (Genexus).  
 • Analysis of implementing electronic invoicing system (Genexus-Web)
- 2009–2011 **Director of Information Technology**, *L'Agenzia Pubblicità C.A.*, Barquisimeto/Caracas, Venezuela,  
 • Project management of web development.  
 • Development of websites using Flash (AS3 advanced), PHP and CodeIgniter
- 2007–2010 **Professor contracted full time**, *Universidad Centroccidental Lisandro Alvarado, Decanato de ciencia y tecnología*, Barquisimeto, Venezuela,  
 • Professor of the course: *Laboratory I*, VI semester of Computer Engineering (Linux, Java).  
 • Professor of the course: *Laboratory II*, VII semester of Computer Engineering (Linux, C/C++, MySQL)
- 2005–2007 **Project Analyst**, *Intercable (now Inter C.A.)*, Barquisimeto, Venezuela,  
 • Development of low-level measurement systems for Internet consumption.  
 • Web development, banking systems interfaces.  
 • Development of low level modules for handling and query remote hardware.  
 • General development
- 2004–2005 **Systems Analyst**, *Outsource Software C.A.*, Caracas, Venezuela,  
 • Development of web systems (asp y asp.net).  
 • Maintenance, management and query of databases (Sql Server, Access).  
 • General support
- 2002–2004 **Systems Analyst**, *Tomorrow Land C.A.*, Punto Fijo, Venezuela,  
 • Development of a billing system integrated with the administrative system Saint Enterprise.  
 • Implementation of administrative systems in different companies.  
 • Database migration.  
 • Creating reports, query databases. (Sql Server)
- 2001–2003 **Founder and Instructor**, *Centro de Asesoramiento y Desarrollo Informático C.A.*, Barquisimeto, Venezuela,  
 • Instructor of programming languages: Java, C/C++.  
 • Instructor Linux Operating System
- 2001–2002 **Trainer and Programmer**, *Computing Center of Decanato de Ciencias y Tecnología (UCLA)*, Barquisimeto, Venezuela,  
 • Trainer responsible for an area of the computer center.  
 • Developer in the internal control system for trainers

## Computer Skills

Operating Systems	Android, GNU/Linux, Windows, MS-DOS
Development Tools	Unity3D, Eclipse, Android SDK/NDK, NetBeans, QT, Flash, Dreamweaver, Genexus, Borland Delphi, Borland C++ Builder, Turbo Pascal, C#, Visual Basic 6.0, Fox Pro, Visual Studio.Net, InterDev.
Programming languages	C/C++, Java, Python, PHP, Javascript, JQuery, AJAX(XML, JSON), HTML5, HTML, ActionScript 3, ASP, JSP, ASP.Net, VBScript.
Game engines	Unity3D (basic), AndEngine (basic).
Graphics Libraries	Java 2D, DirectX, OpenGL (basic), Qt Graphics view framework, libvga (linux).
Web development frameworks	CodeIgniter, Magento, Kumbia Enterprise, Yii.
Error tracking	Crashlitycs, Bugsense.
Test and statistics	Flurry, Testfairly.
Version control systems	Git, Subversion.
Image processing	OpenCV, OpenCL, Processing.
Databases	MySQL, SQLite, Sql Server, XML, Oracle, Access, Interbase.

Graphics Design	Gimp, Ink-Scape, Photoshop, Blender, CorelDraw, AutoCAD, Maya.
UML-Modeling	MySQL Workbench, Umbrello, Visio, Rational Rose, Powersim.
Artificial Intelligence and Soft Computing	Artificial vision (image processing), Fuzzy Logic, Neural Networks, Genetic Algorithms, Machine Learning, classification and prediction systems, metaheuristic search and optimization algorithms.
Research and Scientific Applications	GNU R, MatLab, L <sup>A</sup> T <sub>E</sub> X, Weka.

## Personal abilities and skills

- Willingness and ability to learn new skills quickly.
- Autodidact and researcher.
- Highly adaptable to the needs of the environment.

## Languages

Spanish Native

English Medium. Making the Master in Soft Computing and Intelligent Data Analysis. Coexistence of a year with English speaking mates. Own interest derived from the Computing: reading books and manuals in English on the Web. Interaction with international suppliers.

## Experience in Game Development

- 1995-2015
- Master of Design and Development of Videogames at UPC. Development of the videogame *NanaNigth*.
  - As part of the course *Programming* of the Master of Design and Development of Videogames, I did a team project using C++ and DirectX. A tribute to the turn-based combat mode of X-COM game.
  - For the thesis project of the Master in computer science, I did a simulation of a predator and a prey that interact each other. This done in C++ and Qt. A youtube video can be seen at <https://www.youtube.com/watch?v=WYOYRm5Mj3A>.
  - To practice and evaluate the difficulty of making the game Gorillaz by students, I did a complete implementation of it in C++ and Qt.
  - During the period as a professor at UCLA, the assigned projects were simple games (gorillaz, risk, tower defense, battle tanks, interactive multiplayer game), and to help students to develop them, I did a very simple game engine to draw graphics and help organize the projects. The engine was made in both Java and C++.
  - As an independent project, I did a 50 levels *Sokoban*, using the graphics mode in Turbo Pascal.
  - During the degree on Computer Science, several final projects were games or simulations:
    - Windows Solitaire as project for data structures (stacks and queues) in Delphi.
    - Simulation of an intersection of two avenues. Operating systems, concurrent programming and synchronization of processes in C.

## Scholarships and Merits

- 2011 **European Centre of Soft Computing Scholarship for Academic Formation**, *Master en Soft Computing and Intelligent Data Analysis*, from 10/15/2011 to 07/31/2012

## Conference Papers y Presentations

- 2008 **Path Optimization for Multiple Objectives in Directed Graphs using Genetic Algorithms**, J. Rada, R. Parma, W. Pereira, 2008 IEEE World Congress on Evolutionary Computation, Hong Kong, China
- 2007 **Ant Colony Optimization Applied to an Autonomous Multiagent Game**, R. Parma, W. Pereira, J. Rada, CGames 2007 - 10th International Conference on Computer Games: AI, Animation, Mobile, Educational & Serious Games, Kentucky, Estados Unidos
- 2007 **Speaker at the First Conference of Artificial Intelligence and Programming Languages Under Free Software**, UNEFA  
Barquisimeto, Venezuela
- 2007 **Lecture: Playing with Artificial Intelligence**, the 4th Day Update for System Analyst and Related Careers, with PhD Juan Rada  
Barquisimeto, Venezuela