Curriculum Vitae



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Personal Info

Website: http://rgl.antares-labs.eu
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Languages

- <u>English</u> : Advanced. (C1/CAE) Fluency reading and listening, without problems to express myself, mainly in writing.
- Spanish : Native.
- <u>French</u> : Basic. (A1-A2) Highlighting reading, with almost no experience listening and writing.

Work Experience

- Computer programmer and System administrator at *Telfy Telecom S.L.U.* from December 2019 to the present.
- Programmer at *everis* from April 2017 to August 2018. I worked on four projects for a client in the energy sector, the first one using SAPUI5, two later using jQuery and the last one with jQuery and Leaflet to build an internal application's section for a map with some range filtering and trace selection functionality. I also worked with a testing team on a project, evaluating several formulary windows, fields, layouts and parametrization. There was also a project using speech recognition, where I learned a bit about finite state grammars, language models and speech-to-text synthesis.
- Technical support at *SolidQ* during Spring of 2016. I helped customers with

software setup and configuration, and also worked with the internal support team to update documentation and manage clients' subscriptions.

- English-Spanish translator at *Node.js* in Spring and Summer of 2015. I worked with the Node spanish community to translate the documents of every version, developer publications and the API, along with examples for C++ and Javascript.
- Backend Engineer at *Caribe Activo* during Spring of 2015. I operated their Unix systems, setting up security systems and remote administration, and building their first search engine with Node.js, MongoDB and LevelDB.

Technical Experience and Skills

I use **Plan 9** on a daily basis, along with **OpenBSD** and **Linux**. I designed and implemented my home/laboratory network, including **DHCP** and a **DNS** server handling its own SOA (Start of Authority) using Plan 9, along with a **TFTP** service so that machines can bootup automatically through PXE.

- I'm proficient with **C** and shells like **rc**, **ksh** and **(ba)sh**.
- I use the UNIX text-processing tools (**awk**, **sed**, **grep**, etc) on a daily basis for system administration tasks, also document preparation (**troff** and its macro packages) and manuals.
- I've created concurrent programs under the formal model of **CSP** by Tony Hoare with **Go** as well as Plan 9's **libthread**, and **POSIX threads**.
- I have developed firmware for the Atmel ATmega328P and the STM32F103RB microcontrollers, using both C and Assembly.
- I also have some experience with the Verilog hardware description language and I'm currently learning more (PWM, VGA and UART so far).
- I've used **git**, **mercurial**, and **svn** as version control systems.
- I've built infrastructure for testing and build automation with QEMU/KVM, and I've used the VirtualBox and Hyper-V hypervisors for little projects.
- With respect to my programming style, I focus on making my software **simple**, **clear** and **consistent** above everything. It has proven to be the best for development and future maintenance.
- I have experience using **soldering iron** with precise narrow and batch-soldering wide tips to treat through-hole and surface-mounted electronic components, at temperatures ranging from 200 to 400°C. I've also used **desoldering wick** to clean some joints and non-corrosive **flux**.
- I use my **digital oscilloscope** very often to analyze signals and properties of the hardware I work on, although the features I use have been very simple so far.
- In my previous company I introduced a couple new people to our project, and walked them through our code and *modus operandi*. In the following months we became an effective team, dealing hand on hand with the client and supporting each other throughout the development cycle.

Past Experience

C++: simple text adventures, Pong clone with SDL, a little 2D rigid body physics library.

Go: HTTP(S) servers, a little wiki.

Java: 2D platform/side scrolling prototypes and a couple of games, Apache Cordova basic plugin patching.

JavaScript: Node.js web servers, tools and a web interface for controlling a Parrot AR Drone 2.

Python: Django apps, a basic web crawler over Tor, SSH bruteforcing.

Ruby: Rails apps. **PHP**: A social network with a LAMP stack.

Education

- Books, scientific papers, technical specifications and people's experiences shared on the Internet are my main source of knowledge.
- *Software Security* by Prof. Michael Hicks, University of Maryland, College Park on Coursera MOOC. Earned in September 2016
- *Middle Degree S.M.R. (Sistemas Microinformáticos y Redes)*, I.E.S. Las Espeñetas, Orihuela, ALC. From September 2014 to June 2016
- Some online courses on Science, Engineering, Law & Economy, MIT OpenCourse-Ware, EdX, Stanford Online, HarvardX and Coursera