

Curriculum Vitae:



Pedro Larroy Tovar. Born 3rd of August in 1981 in Zaragoza (Spain).

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Studying 4th course of Superior Telecommunication Engineering at UPC (Polytechnic University of Catalonia, Barcelona, Spain).

Currently doing the following assignments:

- Speech processing. (Pitch estimation, HMM, N-grams, text-to-speech)
- Antennas (Basic antennas, Array antennas/agrupations, apertures)
- Microwave Engineering (S parameters, Hybrids, PIN Schotkey diodes, amplifiers)
- Telematic Laboratory III (Computer simulation of Markov chains, servers, etc. with SES/Workbench)
- Electronic Instrumentation (Error measures, automated lab equipment control with LabView and HP instruments with GPIB and VISA bus: Oscilloscope, multimeter, fn. generator, etc.)
- Emitters and receptors (Study of the RF front-end, SFDR, Noise, PLL, FM receptor)
- Communications Lab II. (Work with DSP, FFT, fir, adaptive filters, adpcm)
- Data mining. Assignment from CS. (Decision trees, Neural networks, knowledge discovery, Clustering. Using Synera and Weka software for practice)

Very good background in math, signal processing communications and networking, specialist in networking and quality of service.

Excellent knowledge about Linux, PERL, C, Web services, databases & SQL, embedded systems, Unix system administration, networking, routing, TCP/IP and QoS.

Took “Xipnova” course about printed circuit board design with Orcad and microcontroller programming with MPLab with applications for robotics. on 2002

Work experience:

Worked as a consultant for SPI Monzón S.L. in July of 2004 for the setup of a IP load balancing system with integrated QoS. The system consisted in the Internet gateway for the Partizip@ Monzon's trade show, which was built with 8x 2Mb ADSL connections which were load balanced and managed with QoS.

Worked as a consultant engineer for Osiatis S.A in the design and programming of a network monitoring system and internal content management platform system from 1st of Dic 2003 To 27th of Feb 2004.

The work consisted in the design and development of a router management

system to monitor mainly Cisco routers from the delegations of the different entities which services were managed by Osiatis S.A.

This system had a custom made application which had the following components:

- Web interface for monitoring router state, view network failures, add routers, dump/restore the database, and perform diagnostic operations such as test a host for reachability, port scan, and integrated java telnet console.
- Monitoring daemon which sends alerts by email and SMS in case of network element failure.

The application was programmed in Perl language with mySQL database engine and the Apache web server with mod_Perl acceleration and SSL encryption with the corresponding SSL certificate infrastructure for secure operation in insecure networks. The software was set up in a Dell Poweredge dual Xeon server running the Debian GNU/Linux operating system.

Worked as networking engineer in the setup of a wireless 802.11b MAN in the city of Barcelona for “La Mercé 2002” festival with Grubit S.A.

(<http://www.bcn.es/sensefils/>)

Consisting in managing the routing, quality of service (QoS) and the IP infrastructure of a wireless network which linked “Virreina” palace with Catalonia square and with “Villaweb” which provided the Internet backbone for the connection.

In the “Virreina” palace, there were a set of public browsing kiosks sponsored by the town hall of Barcelona running Linux which provided Internet and information about the festivities events to the public. Those were linked with Yagi antennas running up “Las Ramblas” with two hops to Catalonia Square in which there was a stand sponsored by Sony and Fnac for public browsing and testing Sony Vaio Laptops.

I spent most of the time managing the QoS and routing of the central router to warrant good speed and fair bandwidth usage.

Worked as programmer to develop a real state application for Fincas Serrablo S.A to manage business data.

This application also was developed with PERL/mySQL/Apache, and consisted in a web interface to manage a web portal of real state entities that were offered or managed by Fincas Serrablo S.A.

Contributor to the “Linux Advanced Routing HOWTO” <http://lartc.org>

Maintainer of the small “Debian multi mirror” open source program

(<http://pedro.larroy.com/debian/debian-multimirror/>)

Worked as network administrator in the Pere Felip Monlau university dorm, where I managed QoS and routing for a network of 200 students sharing a 2Mbps ADSL internet connection. An article of the experience can be read at:

<http://lartc.org/howto/lartc.cookbook.fullnat.intro.html>

Worked as organizer of more than 200 participants LAN party on Huesca for two editions, setting up the network, game servers, etc.

Honors: Regional winner of Physics Olympiad, and also Math Olympiad while in High School.