

Curriculum Vitae

Personal information

Name	Arnau Sánchez Sala
Date of Birth	Barcelona (17/10/1978)
Address	Piloña, Asturias
E-mail	pyarnau@gmail.com
Marital Status	Single
Driving license	A/B/C

Qualifications

2001

Telecommunication Engineering (Universidad Politécnica de Catalunya (<http://www.upc.es>)).
5º course and thesis at Universidad Politécnica de Madrid (<http://www.upm.es>).

Languages

Spanish, Catalan

Mother-tongue.

English

FCE (<http://www.cambridgeesol.org/exams/general-english/fce.htm>) (First Certificate in English).

French

Intermediate level

German

Elementary level.

Skills

Operating Systems administration

- Microsoft Windows (<http://www.microsoft.com>) (98/NT/2000/XP).
- GNU/Linux (Debian (<http://www.debian.org>), Ubuntu (<http://www.ubuntu.com>), CentOS (<http://www.centos.com>), Gentoo (<http://www.gentoo.org>)).
- *BSD (OpenBSD (<http://www.openbsd.org>), FreeBSD (<http://www.freebsd.org>), NetBSD (<http://www.netbsd.org>)).

Programming

- Languages: C++ (<http://es.wikipedia.org/wiki/C%2B%2B>), Java (<http://www.java.org>), Erlang (<http://www.erlang.org>), LISP (<http://www.lisp.org>), Scheme (<http://groups.csail.mit.edu/mac/projects/scheme/>), Haskell (<http://www.haskell.org>), Perl (<http://www.perl.com>), PHP (<http://www.php.com>), Javascript. Proficiency in 80x86 assembler, C, Python (<http://www.python.org>), Lua (<http://www.lua.org>), Ruby (<http://www.ruby.org>), and UNIX Shell (Bash, Ksh).
- Web development: Ruby (Ruby on Rails (<http://www.ruby-on-rails.org>)) and Python (Django (<http://www.djangoproject.com>), Turbogears (<http://turbogears.com>), Pylons (<http://pylonshq.com>)).
- GUI applications (free toolkits GTK, Wx, QT), databases (SQLite (<http://sqlite.org>), MySQL (<http://www.mysql.com>), PostgreSQL (<http://www.postgresql.org>)).
- Kernel modules (branches 2.4 and 2.6).
- Reverse-engineering (debuggers and disassemblers for Win32 and Linux).
- TDD (<http://es.wikipedia.org/wiki/Tdd>) (Test-driven development).

Network management

- Remote file-systems (Samba, NFS).
- Web servers (Apache (<http://www.apache.org>), Lighttpd (<http://www.lighttpd.net>)).
- Mail servers (Sendmail (<http://www.sendmail.org>), Postfix (<http://www.postfix.org>)) y webmail (Squirrelmail (<http://www.squirrelmail.org>)).
- Security, privacy (GPG), firewalls (Iptables (<http://www.netfilter.org>)).
- Virtual Private Networks
- Network management protocols and software (SNMP, Zabbix (<http://www.zabbix.org>), Nagios (<http://www.nagios.org>)).
- Emulation and virtualization: Qemu (<http://www.qemu.org>), VirtualBox (<http://www.virtualbox>), VMWare (<http://www.vmware.com>).

VoIP

- Hardware (IP phones, ATA).
- Software (Asterisk (<http://www.asterisk.org>)).

Electronics

- Solar photovoltaic systems.
- ST6, PIC micro-controllers

VHF/UHF/HF Radio networks

- Modulations (FSK, QAM, OFDM), FEC algorithms (BCH, Reed-Solomon, Turbocodes).

- Phonepatches. Main developer of asterisk-phonepatch (<http://www.nongnu.org/asterisk-phpatch>).

WiFi

- Embedded boards (Soekris (<http://www.soekris.com>), WRAP (<http://www.mini-box.com>))
- Distributions (Peeble (<http://www.nycwireless.net/supernode/pebble-linux/>), Voyage (<http://wiki.voyage.hk>)).

Professional experience

1998-2000

Scholar at Facultad de Informática de Barcelona (<http://www.fib.upc.edu>) (FIB-UPC), installation and maintenance of software and hardware.

2001-2002

Scholar at UPM. Thesis: "Radio links optimization on AX25 with DAMA-protocol and TCP/IP".

2003-2007

Developer at EHAS (<http://www.ahas.org>), working on HF/VHF radio links, web development (CherryPy and Turbogears), hardware design, installation and maintenance of networks in the Peruvian forest (GNU/Linux client and servers).

2008

Rails developer at Gnuine (<http://www.gnuine.com>), using agile development and TDD (<http://es.wikipedia.org/wiki/Tdd>) (Test Driven Development).

2009

Software freelance developer mainly focusing on web and Rails development.

Articles

2005

Conference: "HF radio links for Rural Telemedicine Systems in Developing Countries" at School on Radio Based Computer Networking for Developing Countries del ICTP (<http://www.ictp.trieste.it>).

2007

Article "Low-cost telecommunication System and information services for rural primary healthcare in developing countries" para el congreso WITFOR (<http://www.witfor.org>) 2007 (World IT Forum).