

Benoit PAPILLAULT

10, rue René Jacques - 92130 ISSY LES MOULINEAUX

☎ 06 81 40 84 51 - ✉ benoit.papillault@free.fr

36 years, married, 1 child (3 years old)



Software architect - Embedded Linux expert

10+ years of experience

PROFESSIONAL EXPERIENCE

LUCEOR

Issy-les-Moulineaux
2005-Today

Chief Technical Officer

LUCEOR SAS designs and sells solutions based on Mesh routing technology for the video surveillance market.

- Design of different wireless products - Mesh Wi-Fi router (outdoor, indoor, embedded in vehicle) and associated softwares (SNMP based network management tool, installation tool)
- Development of hardware products based on OpenWrt, a Linux embedded development environment
- Integration of Atheros (US) and Ralink (TW) Wi-Fi chipsets drivers
- Technical team management
- Recruitment of technical profiles



Language : C/C++ (GNU cross compilation toolchain)

Operating System : Linux (Debian, OpenWrt), Windows XP/Vista

Version control : git, subversion

Bug tracking : mantis

Library : Qt from Nokia, net-snmp

Tools : latex (for customer documentation), NSIS (installer)

AOL France

Neuilly
2003-2004

Project Manager

AOL France, Internet Service Provider, liked to improved the quality of its Internet connection software, particularly at the modem level (Dialup, DSL, ...)

- Contribution to AOL Europe and AOL US projects
- Monitoring of tests targeted to selected customers, in relation with Member Services
- Coordination with Marketing and Legal services for distributing



modem drivers in AOL 9.0 CD-ROM content.

- Signed agreement with Smartlink company in order to allow such re-distribution

Language : Perl

Operating System : Windows, Linux (Mandrake)

Database : MySQL

VisualPix
Bordeaux
2002-2003

Project Manager

VisualPix SA sells a hardware and software video surveillance platform based on up-to-date video compression technology, in partnership with LaBRI (Laboratoire Bordelais de Recherche en Informatique).

- Development of the software base including all basic functions for a digital video surveillance system.
- Use of the ALFS Linux distribution for the embedded system
- Development of a kernel module for temporal decimation, based on Video4Linux API
- Design of a modular codec API in C used to ease software evolution, Linux/Windows cross platform
- Development of a PHP web interface for video viewing and administration
- Development of viewing components (Java applet, ActiveX) for Linux/Windows
- Management of a 3 people team



Language : C/C++, Java, PHP

Operating System : Linux (Redhat) / Windows XP

Opteway SA
Sophia-Antipolis
1999-2002

R&D Engineer

Opteway SA, cartographic software editor, designs and sells a localization based services build on an application server as the central component, using a unique vectorial cartographic technology based on internal R&D work.

- Development of a TCP/IP client under Windows CE
- Development of a cartographic server under Linux, Compaq Tru64 Unix, Solaris and HP-UX, used to handled localization requests
- Study regarding WAP terminals in order to convert vectorial maps to WBMP images (bitmap)
- Development under Windows CE in order to handle Internet

connections

- Replacement of perl based serveur by a modular multithreaded C++ server under Linux
- Design of an XML interface over a proprietary transfer protocol
- Tests on multiprocessors Linux machines (32 processors), Solaris (Sparc) machines and Tru64 machines
- Porting to the HP-UX platform
- Work done in a team of 2 to 6 people

Language : C++, XML

Operating System : Linux (RedHat), Solaris, Tru64, HP-UX

Alcatel
Colombes
1999

R&D Engineer

Graphical interface development for the next generation of GSM terminal.

- Reading of detailed technical specifications
- Implementation of code responsible for menu handling
- Test of the SMS part (editing, deleting, sending, receiving)
- Mission done in a 40 people team

Language : C

Operating System : Solaris

Alcatel
Brest
1996-1997

Young Engineer

Development of validation tools for a PABX

- Use of the existing tool running under MS-DOS
- Development of graphical interface with Visual C++

Language : C++

Operating System : Windows NT4



Alcatel-Lucent



Alcatel-Lucent

SKILLS

→ Technical skills

- Languages : C/C++, shell script, Java
- Operating Systems : Linux (Debian, Ubuntu, ...), embedded Linux (OpenWrt), Windows
- Target processors : Intel x86, AMD 64 bits, PowerPC, MIPS, ARM
- Development tools : GNU C/C++ , Qt, autoconf, automake, NSIS, Visual C++, MFC
- Databases : MySQL
- Software configuration management : git, subversion, cvs
- Modeling Languages : UML, Design Pattern
- Project Management : MS Project, GanttProject, TaskJuggler
- Network : TCP/IP, iptables (firewall), OpenSSH, SNMP, 802.11 (Wi-Fi)
- Foreign language : English (fluent)

→ Management skills

- Day to day management of a technical team with weekly report
- Coordination of a team of 10 people over Internet

DEGREES

- Software and Network Engineer, ENST de Bretagne (1998)
- Computer Science Master, Rennes I University (1998)

EXTRA-PROFESSIONAL EXPERIENCE

MadWiFi Driver

2005-2009

Core Developer

Major contribution to the development of a Linux driver for the Atheros 802.11abg Wi-Fi chipsets.

- Development of the DFS / 802.11h feature needed to use the 5GHz band in Europe (ETSI) and US (FCC)
- Design and implementation of a radar detection algorithm
- AdHoc mode debugging (clocks synchronization at micro second resolution, frequency switch, ...)

LINAC Association

Angoulême

2003-2005

Permanent secretary

LINAC association (Linux Angoulême Charente) goal is to promote the use of Free Software, such as Linux.

- Participation in organizing various events (First Jeudi, Install Party, ...)
- General assembly report

SourceMage distribution

2003-2004

Developer

Created in late 2002, the unique feature of this distribution based on source comes from its package management tool, fully written in shell scripts.

- Implementation of an installer from a booting CD-ROM
- Work with a team of few people (France, Germany, US)
- Publication of an article describing the installatin in Planète Linux magazine in December, 2003
- Release of 11 consecutive versions for Intel processors at the beginning, and then PowerPC and AMD 64 bits

Eci Adsl Driver
2001-2005

Developer

Development of a Linux driver for the ECI ADSL USB modem under an Open Source license.

- Implementation of a first functional version
- Analysis of USB frames sent by the Windows driver
- Re-use of source code written during the SpeedTouch project
- Implementation, tests and documentation of the driver
- Around 10 people's team

SpeedTouch Driver
2001-2005

Project leader

Development of a Linux driver for the Alcatel USB ADSL Speedtouch modem under an Open Source license.

- Management of a team (10 people) around a software development project over Internet
- Implementation of a Windows driver (WDM) in order to analyze USB frames sent by the Windows driver
- Implementation, tests and documentation of the driver
- Around 10 people's team