

**PROFILE: EXPERT SOFTWARE ENGINEER**

- **Philippe COVAL** : <http://purl.org/rzer> -- mailto:philippe.coval.pro@gmail.com
- Objective: A challenging position as technical leader / strategist involving Open Source technologies.
- Flexible environment in an international context would be appreciated.
- French Citizenship based in Rennes, France.

**CURRENT POSITION: Volunteer contributor in FLOSS community:**

- Mozilla Rep: Community support for connected devices (WebThings: JS, Python)
- Lead community effort to maintain abandoned opensource projects
- Software packager and maintainer in OSS organizations: Debian, and Ubuntu, NodeJs/NPM.
- Code contributions, bug reporting, patches, tutorials, demos/hacks etc
- Open cooperation/innovation advocacy:
  - <https://purl.org/rzer/presentations>

**PAST WORK EXPERIENCES: 20 years as Software Engineer**

- **Eclipse Oniro (OSTC-eu.org)** 2021/2022 - Remote, France
  - DogFodding, Code contributions, SW/HW Integration, Blueprints PoC Demos Prototyping and Marketting, Requirements/Market analysis, Consumers/Community support
  - Technologies: Yocto project, Linux, Zephyr RTOS, LVGL, Flutter, OpenThread, gitlab ...
- **Samsung Research UK (OSG)** - 2016/2020 - London/Remote
  - Maintainer and contributor to Opensource projects in IoT domain:
  - Projects: IoTivity, Automotive Grade Linux, GENIVI, IoT.js, TizenRT/NuttX, WebThings, Web Of Twins
  - Built proof of concepts presented at international conferences (EU, USA, Asia)
  - Code contributions and Community support
  - Technologies: Linux, Yocto, MCU, RTOS, JavaScript, VR, IO/Sensors ...
- **Intel OTC** - 2012/2016 (contractor), Britany France
  - Lead "UI Integration team" for TizenPC (Linux+Gnome base)
  - Maintainer, Code reviewer of 200+ packages (git, gbs, gerrit).
  - Mentor other members or contributors in current projects.
  - Trouble shooting, bug fix, merged patches in upstream projects
    - Added support of Wayland's xdg-shell to Qt, GNOME,
  - Performance check and tuning core components.
  - Research and contributions to the Linux/Tizen platform.
  - Strong presence in OpenSource communities online and social events:
    - Presented works at some conferences: TDS Shanghai 2014, Fosdem 2014, SolutionsLinux Paris 2013...
    - Valorisation : Prepared, recorded, published demos, lectures on company's blog
    - Published article into Linux Magazine Fr and reviewed Book.
    - Attended events: Tizen, Fosdem, LinuxCon europe ...
  - Various research on internal projects (OpenSource Hardware, IoT).
- **NewLC / Wedia** - 2009/2012 , Rennes France
  - Lead / Consulting for various customers and projects in the mobile industries (Architecture, Coordination offshore team)
  - Expert in Linux Mobile : Android, MeeGo, Maemo, OpenMoko, Qt, Java, ...
  - Instructor: Designing portable applications using C++ Qt Framework.
  - Android/Linux expert (ARM/X86, alsa, C/C++/JNI, multimedia interactivity ) developed Civolution's 2d screen product.
- **Thomson / Technicolor** - 2008/2009 (contractor) , Rennes France
  - Linux kernel developer (optimization, IPTV, Embedded Set top box)
  - Infrastructure manager (workflow, continuous integration, linux desktop, scm ...)
  - Release manager, deployment and customer support (packaging, virtualization)
- **France Telecom R&D / Orange Labs** - 2004/2007 (contractor) , Rennes France
  - Design and realization of applications resulting from FT's innovation in the following domains:
    - Multimedia: 3D Rendering, Video Codec, Augmented Reality (*C++, OpenGL/ES, VRML, OpenCV, M3G, MPEG4*)
    - Mobile computing, Embedded, cross-platform ports (*Linux, Windows, WinCE, J2ME, Qt, CMake*)
    - Networks: Streaming, Client/Server, and routing on a Linux based home gateway
  - Infrastructure manager and quality agent:

- Automation of compilations, tests, validation process
- Benchmarking Performance and optimization (*linux kernel's oprofile, gnuplot, python, nfs, shell, awk...*)
- Administration of collaborative systems, Bug Tracking (*forge, SCM, svn, buildbot, lists, wiki, docs, scripts*)
- INRIA / IRISA - 2000/2002 , Rennes France
  - Interactive 3D Video Player (*C++, OpenGL, jpeg2000 video codec, RTP streaming ...*)
- Internship R&D: IRIT / Transiciel, 2000
  - Virtual Reality for the Web (*vrml, 3d, motion capture, web applet, java, rmi, jni*)
- System administrator & Web Developer - INSA, Sept.1997/Feb.99 , Toulouse France
  - *System Unix, Web (HTML, Perl, CGI, PostgreSQL, Java, POVray)*
- Several training courses and side jobs (more than 2 years if accumulated) : Webdesign, Free software ...

## **SKILLS & KNOWLEDGE: Embedded System, Design, Programming .**

- **Methods & Quality:** OSS, Remote cooperation, DevOps
  - Cooperation models, Work-flow definition, Respect of standards, and licenses
  - Testing, Task automation, Continuous Integration / Delivery (git pipelines).
- **Programming:** Design, OOP, Design Patterns, Portability, Platform / Applications
  - C/C++: *POSIX API, Templates, STL, multi-threading... Qt, GTK+* .
  - Script Languages: *JavaScript, Python, Posix Shell / Bash, Makefiles, CMake, Scons, YAML, XML/SGML, SQL, ...*
  - Others: *REST API, GoLang, RUST, Java (JNI, Android), ASM, ...*
- **Platforms/Environment:** GNU/Unix, MCUs
  - Hardware: *Open Source Hardware (ARM/x86), IoT / Wearables, Sensors, I/O (I2C, UART, ADC, PWM, SPI...)*
  - GNU/Unix: *POSIX API, GNU toolchain/buildsystems (gcc, gmake, autotools, emacs,...), cross-platform env*
  - Embedded / Mobile / IoT: Os: *Linux Kernel, Yocto/OpenEmbedded, Android, RTOS / MCUs: Zephyr NuttX, TizenRT, RIOT-OS, Arduino.*
  - Cloud/ Edge: Docker, Vagrant, K8S
- **Computing Culture:** Open-Source technologies, mobile, multimedia
  - Open Source: active in several communities ( Debian, Ubuntu, Eclipse, Mozilla ...)
  - UI/UX: *Multimedia, 3D/VR/XR OpenGL, Video, Image processing.*
  - Networking: *Client/Server, Streaming Protocols: TCP/IP, RTP/UDP, HTTP, FTP, NFS, RPC, CoAP, MQTT, BLE, Thread.*
  - Web: on-line since 1995: *WebAPI, HTML5, REST, WS, NodeJs, XML, php, cgi, perl, lamp, apache, mySQL ...*

## **ACADEMIC BACKGROUND: 5 Years**

- Post-MS graduate degree: Engineering, Computer Graphics, (French DESS / Specialization year)  
*UPS (5th Year 1999)* , Grade: First / Good
- BS and Master Degree in Computers Science (French diplomas: licence and maitrise)  
*University of Sciences "Paul Sabatier", Toulouse FRANCE*
- My native language is French and I read/write English daily on-line and not shy to talk.
- Also I have a few German, Spanish, Russian and Indonesian notions.

## **ADDITIONAL INFORMATIONS:**

- Recognition: OCF award, Mozilla Rep Nokia/Qt Ambassador, Orange HTML5's Best technical performance , Tizen contest 2012 and RIM/BlackBerry10 challenge too.
- Hobbies: DiY / maker, electronics, Bass guitar, outdoor activities, traveling...
- I feel very curious and open minded, and I like sharing experiences with various people and culture.

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References are available upon request.

More details can be accessed through links of the online version:

<http://rzer.online.fr/job.htm>

***IoT, Yocto, GNU/Linux, Debian, FLOSS Communities ,  
C/C++, Wearable, Tizen, Qt, Git, Python, Unix Shells,  
Ubuntu, code profiling / optimization, Integration, WorkFlows , HMI  
/ GNOME, Android, RPM, JavaScript/HTML5 , Java, GStreamer, ArchLinux, 3D, OpenGL, SCM, XML, HWE  
MeeGo, OpenMoko, Maemo, libinput, syslinux, snap, ALSA,  
Multimedia, Audio/Video, Networking, BSP, HWE, OSHW, Web, R&D, GTK, VRML, TCP/IP, UDP, RTP, HTTP, FTP, PHP,***

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CV also available in French: <http://rzer.online.fr/cv.htm>

Other formats (may be outdated): PDF, PS, TXT, ODT

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<http://rzer.online.fr/resume.htm # 2020>