Jean-Charles **Quillet**

SENIOR SOFTWARE DEVELOPER · FUNCTIONAL PROGRAMMING

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Summary

I am a software developer with a large experience in very diverse fields. I have worked as a backend developer, have written desktop applications, simulation software as well as network servers.

I have had the chance to work with low-level object-oriented programming such as C++ which I have used professionally for more than ten years, and also with very high-level functional programming languages such as Haskell. These different approaches give me a good comprehension of the mechanisms at work in software development, always driven by the goal of developing correct, safe, and robust software.

Skills

Main skills	Architecture and software design
	Functional and object oriented programming
	Networking / Linux systems administration
	Geographic Information Systems
	Geometry and 3D rendering
Programming	Haskell, Rust, Elm, C/C++, Python, Bash
Development tools	Nix, Make, Git, Jenkins, Ansible, Docker
Scientific tools	Matlab, Octave, gnuplot
Operating systems	Windows, Linux (NixOS, ArchLinux, Ubuntu, CentOS, Debian)
Languages	French: mother tongue, English: fluent, Spanish: beginner

Experience

Tiko
Zürich, Switzerland / Remote

BACKEND DEVELOPER — *Since 01/2024*

- Interface between IoT devices and backend services
- Technical environment: Linux, Haskell, nix, K8s, PostgreSQL, MySQL, Redis, Kafka, MQTT

Secucloud
Hamburg, Germany / Remote

CLOUD SOFTWARE DEVELOPER — *11/2020 - 11/2023*

- Developed cloud network security software
- Technical environment: Linux, Haskell, JavaScript, nix, MySQL, Ansible, Redis, Clickhouse

Epitech
Rennes, France

FUNCTIONAL PROGRAMMING TEACHER — *09/2021 - 06/2023 (part time)*

- Supported the students with their Haskell projects (Arithmetic expression evaluator, Lisp interpretor, image compression algorithm ...)
- Technical environment: Linux, Haskell, nix

Scalian
Rennes, France

SOFTWARE DEVELOPER FOR AN IT SERVICES COMPANY — *04/2007 - 11/2020*

- Developed simulation software in the department Simulation, HPC and Virtual Reality
- Architecture and technical lead
- Technical documentation writing
- Clients: french MoD, ONERA, CEA, CNES, IRSN
- Technical environment: Windows/Linux, C++, Python, Matlab, Qt, openscenegraph, gdal

LaBRI Analysis and indexing video team (University lab)
Bordeaux, France

RESEARCH ENGINEER — *07/2006 – 08/2006*

- Prepared the video indexing contests TRECVID and ARGOS
- System administration
- Technical environment: Linux, C/C++, XML, Perl, Bash

INRIA IPARLA team (French IT lab)
Bordeaux, France

RESEARCH ENGINEER — *09/2004 – 04/2006*

- Visualization of city models on mobile devices though non-photorealistic rendering
- Wrote and presented a scientific paper to the Web3D 2006 conference in Washington
- Technical environment: Linux, Windows, Windows Mobile, C/C++, Bash, Perl, VRML97, X3D

Keyghost *Christchurch, New-Zealand*

SOFTWARE DEVELOPER *04/2003 - 12/2003*

- Developed security software
- Technical environment: Windows, Delphi, C/C++, Octave

Visualpix *Bordeaux, France*

INTERNSHIP FOLLOWED BY A SOFTWARE ENGINEER CONTRACT *04/2002 - 12/2002*

- Improved a video compression codec
- Technical environment: Linux, C

Glisshouse *Marseille, France*

BACKEND DEVELOPER, SYSTEM ADMINISTRATOR *07/2000 - 03/2001*

- Web: Maintained an online shop, developed a CMS
- System administration: Installed, setup and maintained the LAN (router, DNS, firewall, proxy, backup management, file server, print server)
- Technical environment: Linux, Php, MySQL, Apache, Samba, cron

Education

2001 - 2002	**DESS Multimedia and Information Technology**, image synthesis and analysis, 3D geometry and rendering, sound, video	*Bordeaux university*
1999 - 2000	**Master in computer science**, image synthesis and analysis	*Poitiers university*
1998 - 1999	**B.S. in computer science**	*Limoges university*
1996 - 1997	**DEUG computer science and mathematics**	*Limoges university*
1995 - 1996	**Baccalauréat Science**	*Lycée Jean Giraudoux, Châteauroux*

Extracurricular Activity

Sports	Rock climbing, bike commuting, surf, trekking
Culture	Literature (classical, travel, adventure), cinema, attending rock concerts, guitar playing
Community commitments	Member of the direction comity of the rock climbing club of Rennes (2012 to 2016) Volunteered at concert venues of Rennes: Antipode (2011 to 2015), le Jardin Moderne (2009 to 2010) Volunteered to the music festivals Epipapu (2009, 2010) and la Route du Rock (2008 - 2018)
Travel	New-Zealand, Australia, USA, Canada, Malaysia, Bali, Bolivia, Iceland, Norway, Scotland, Faroe Islands