

Christophe
REYNIER


Enthusiastic
holistic Art'chitect
& Engineering
manager



 LinkedIn

 Facebook

 BandLab

 SoundCloud

Dynamic and enthusiastic engineer, I have learned during 20 years how system architecture and software design is an *Art*.

That is why I define myself as an *Art 'chitect* because it's not only technical skills but how you have a vision and be able to communicate and guide multiples teams around a project in an iterative development approach producing and sharing visual and textual engineering artifacts.

I have been playing different roles in many kind of applications development projects : Embedded Firmware, Web digital platform, Artificial intelligence, Data processing, Real-Time or Safety critical. My professional experiences led me to gain extensive technical skills in system and software domain as well as working in international context with different cultures (Europe, USA, India, China).

44 years old
Driving License

✉ chri.reynier [at] gmail.com

EXPERIENCES

Software Development LifeCycle Coordinator

ESI Group - Since February 2023



- ▶ S-SDLC Leadership: Leading the implementation and enhancement of the Secure Software Development LifeCycle (S-SDLC) and DevSecOps within the organization. Collaborating with cross-functional teams to define and enforce best practices for secure software development, including requirements gathering, threat modeling, code review, testing (SAST, DAST), and deployment.
- ▶ Coaching and Mentoring: Guiding the product team in adopting and implementing secure coding practices, security testing methodologies, and vulnerability management techniques. Providing hands-on training, resources, and support to empower team members in their professional growth and enable them to produce secure software products.
- ▶ Open-Source Management: Leading the strategic management of open-source software (OSS) within the organization. Establishing governance frameworks, policies, and procedures for evaluating, integrating, and tracking OSS components. Collaborating with external communities (SPDX) and contributing to the improvement and sustainability of open-source projects.
- ▶ Security Advocacy: Advocating for security awareness and education across the organization. Promoting a security-first mindset, fostering a culture of proactive risk management, and facilitating effective communication between development, security, and business teams.
- ▶ Continuous Improvement: Driving continuous improvement initiatives related to software security, including process enhancements, tooling evaluation, and automation implementation. Staying up-to-date with industry trends, emerging threats, and evolving best practices to ensure the organization remains at the forefront of secure software development.

CTO - Engineering Manager

TKM - TecKnowMetrix - February 2022 to February 2023 - Full-time - Voiron - France



- ▶ Define the technical and architectural vision of the digital platform and drive the strategy in a fast evolving context
- ▶ Lead a team of Data Scientists, Full stack developers and Co-Ops with Agile methodology.
- ▶ Responsible of the IT Cloud Infrastructure
- ▶ Lead and coordinate the R&D projects with the customers
- ▶ Deliver patch upgrade and new version of IPMetrix application every 2 weeks in SaaS mode

Chief System Architect

Fresenius Kabi - March 2020 to February 2022 - France



Lead the overall Device and IT systems architecture, in a multi-site teams (FR, US, CN) environment, to elaborate the best technical strategy to meet the programs and projects objectives.

System and Software supply teacher - Engineer biomedical students

Polytech' Lyon - September 2019 to July 2022



- ▶ Animation of 9h of master class teaching Medical Devices Engineering - System & Software in modern industry.
- ▶ 30 students average
Hybrid remote and on-site class animation (Covid period)

IT System Chief Architect & I&D Manager

Fresenius Kabi - April 2018 to March 2020 - France



- ▶ Technical leader of the global IT architecture of Fresenius Kabi Medical Infusion Device Division
- ▶ Leading a team of 40 engineers spread across 2 sites (FR and US)

System Architect - IT Connectivity Solutions



Fresenius Kabi - November 2015 to March 2018 - Full-time - Brézins - France

- ▶ Distributed system architecture permitting medical data transmission within the hospital infrastructure.
- ▶ Management of the technical team for the component implementation
- ▶ Service Oriented Architecture design
- ▶ Messaging Oriented Middleware technology

Software platform architect



Fresenius Vial - January 2014 to October 2015 - Full-time - Brézins - France

- ▶ Ensure technical consistency of the software platform for 4 OS (Linux, Windows, SafeRTOS, Integrity)
- ▶ Interacts with the managers which have project based on the platform for planning future release
- ▶ Management of the technical team for software development

Software project manager and integrator



Fresenius - March 2012 to December 2013 - Full-time - Brézins - France

- ▶ Responsible of the source code integration
- ▶ Responsible of the SW planning, delivery and documentation
- ▶ Manage the project SW team

Consultant for software engineering



Médiane Système - December 2008 to February 2011 - Full-time - Grenoble - France

- ▶ UML design, development and continuous integration of a software embedded in a enteral pump medical device.
Development in C++ of a Framework, components (Business Logic) and an application within the frame of the IEC62304 norm. Teamwork.
Activities : Integrator, Architect, Developer
Technologies : C++, UML, SafeRTOS, Embedded, Eclipse, Enterprise Architect, MISRA, IEC62304, SVN
- ▶ UML design and development of a software embedded in a medical rack that permits to hold, connect et parse the data of medical volumetric pumps
development in C++ of a Framework, components distributed in libraries and applications for the new medical device of the company within the frame of the IEC62304 norm.
Teamwork.. Teamwork.
Activities : Architect, Developer
Technologies : C++, UML, Linux, Embedded, Eclipse, Enterprise Architect, MISRA, IEC62304, SVN
- ▶ Development of an embedded service on XP for controlling and acquiring measurements of a radioactive probe. Stored in a SQL database, the measures are transmitted to an FTP server via an XML file.
Activities : Developer
Technologies : C#, SQL, JBUS, FTP
- ▶ Development of a testbed for automated circuit breaker.
Activities : Developer
Technologies : C++, RS232, parallel port

Research and Development Engineer



Sleepinnov Technology - December 2003 to October 2008 - Full-time - Moirans - France

- ▶ SleepInnov Technology develops medical devices for diagnosing diseases caused by breathing problems during sleep (SAS)
- ▶ Design and development of the BlueNight product for the acquisition and analysis of the sleep via a Bluetooth oximeter sensor.
Technologies: C++, Visual Studio, Windows Mobile, Bluetooth, Objet COM

- ▶ Design and development of the SensiTest product which permits to test the pharyngeal sensitivity.
Technologies: C++, Visual Studio, RS232, Objet COM
- ▶ Participation in the implementation of the quality management system for the company certification in 2005 with standards.
Technologies: ISO-13485 et ISO-9001.
- ▶ Commercial website update
Creation of a private secure access for the BlueNight users: Licence managing for retailers, update download, statistics...
Technologies: PHP, MySQL, HTML, CSS, JScript, Dreamweaver, Fireworks

Research and Development Engineer

Laboratoire TIMC - équipe GMCAO - April 2002 to October 2003 - Part-time - La Tronche - France

Study and development of the computer-aided prostate brachytherapy project (PROCUR)
Technologies: C++, Visual Studio, MFC, OpenGL 2D/3D Matching Algorithm

Software Engineer

LBFA UJF - Washington University School of Medicine - May 2001 to August 2001 - Internship - Grenoble France - St Louis MO USA - France

Adding to an existing software measurement of calcium concentration in the intrinsic blood vessels of mice

Technologies: C++, Visual Studio, MFC, Win32, NiDaq

SKILLS

Quality

- ▶ MISRA
- ▶ ISO-9001, ISO-13485 , IEC62304, AAMI-TIR32

Computer Science

- ▶ Distributed Team management (Agility/Scrum, JIRA, SAFe) ★★★★★☆
- ▶ Design Modeling (UML, BPML, Enterprise Architecture, PlantUML) ★★★★★
- ▶ Coding (C++, C#, C, Python) ★★★★★☆
- ▶ Code Version control (GIT, SVN, Bitbucket, GitHub) ★★★★★☆
- ▶ Code Analyze (Resharper, Klocwork, SonarQube) ★★★★★☆☆
- ▶ Development environment (Windows Linux, C++, C#, C, Python) ★★★★★☆
- ▶ Web Development (XMLXSL\CSS, PHP, HTML, JSCRIPT) ★★★★★☆☆
- ▶ Messaging (RabbitMQ, MQTT, Kafka, Google Protobuf, JSON, XML, SOAP, HTTP) ★★★★★☆
- ▶ Microservice (Docker, Kurbnetete) ★★★★★☆☆
- ▶ Database (SolR, MariaDB, MongoDB,Microsoft SQL, MySQL, SQLite, PostgreSQL, Redis) ★★★★★☆☆
- ▶ CICD (Jenkins, Bamboo) ★★★★★☆☆
- ▶ MultiThreading API (POSIX, Windows) ★★★★★☆

Language

- ▶ English: use english in my everyday professional life
- ▶ French: mother tongue

EDUCATION

Training - POSIX Multithreading under embedded Linux

CENOSYS

June 2010

Microsoft Certified Partner Certification

GLOBAL KNOWLEDGE

December 2009

Certification Microsoft Professionnel (MCP) pour le développement d'application .NET en C#

Engineer in Industrial computer science and instrumentation engineering

POLYTECH' GRENOBLE - UNIVERSITÉ GRENOBLE 1 JOSEPH FOURIER

September 1999 to September 2002

Technician in Industrial Electrical Engineering and Computer Science

IUT - UNIVERSITÉ GRENOBLE 1 JOSEPH FOURIER

September 1997 to August 1999

INTERESTS

Arts

- ▶ Electronic Music Composer
- ▶ Digital photography

Sport

- ▶ Aïkido
- ▶ Running

Music

- ▶ Piano
- ▶ Saxophone