

# Sylvain Leroy

SOFTWARE MODERNIZATION ARCHITECT, SENIOR FULLSTACK DEVELOPER

Chemin de Bérée 16B, Lausanne, Switzerland

☎ (+41) 76-40-11-931 | ✉ [job@sylvainleroy.com](mailto:job@sylvainleroy.com) | 🏠 <https://sylvainleroy.com> | 📺 [sleroy0](#) | 🌐 [sylvain-leroy-byoskill](#)

*"Innovation is the right balance between risk and conservatism"*

## Education

### Coursera

GOOGLE CLOUD SOLUTION ARCHITECT COURSE ( ON-GOING)

- Google Cloud Platform, Networking, IAM, Compute Engine

WEB

Feb. 2020

### NINJA SQUAD

ANGULAR 2 TRAINING

- Angular 2 and Typescript training

Geneva

Jan. 2017

### INRIA, IRISA, University of Rennes 1.

COMPILER, PERFORMANCE AND MICRO ARCHITECTURE, MASTER OF RESEARCH (RM2) PROGRAM

- Specialization in compilation technics to create source-to-source(transpiling) frameworks for performance optimisations

Rennes, France

Jun. 2007 - 2004

### IUT Lannion, University of Rennes 1.

BACHELOR OF COMPUTER SCIENCES,

- C/C++ Software development course, requirements, team management.

Lannion, France

Jun. 2004 - 2002

## Programming Skills

### Programming Languages

Java 8,11+, JavaScript, TypeScript, Groovy

### Web/UI

Vue.JS (vuex, vue-router), , Angular 8+, React-Native, Thymeleaf, JSF, Wicket

### Frameworks

Spring Boot, Spring 5, CXF, MyBatis, Hibernate, Node.JS, Express, Loopback 3-4

### Machine Learning

DeepLearning4j, Smile, Weka, KNime

### Test Tools

Selenium, Puppeteer, SoapUI, Performance tooling, Cucumber, JBehave, JUnit 5/4, Mockito, Postman

## Architecture skills

### Software Architecture

Cleancode, CQRS, DDD, Hexa/Clean Architectures, Microservices

### Cloud

Terraform, Google Cloud (GCE, GKE, Pub/Sub, GCB, API), Amazon(S3, EC2, ECK, ECS, ELB, ECR, IAM)

### SAAS Services

DataTrans, Google API, Mailchimp, Mailjet, Auth0, Stripe

### Legacy Software migration

Cloud Software migration (Monoliths), Test Automation, 12 Factors, Source-to-source expert

### Mainframe experience

Cobol (Code review), Java - Mainframe Integration (3270, Messaging)

### Databases

MySQL/MariaDB, MongoDB, Elasticsearch, Neo4J, Sqlite, Oracle

### Platform services

Tomcat, Varnish, RabbitMQ, ActiveMQ, JBOSS Keycloak, Apache2, JBOSS, HAProxy

## Soft skills

### Team management

20+ IT staff management, Product Owner, Roadmap, Agile/Kanban, SAFE, Scrum, Waterfall

### Software Quality Assurance

ISO 9126, ISO 25000, Balanced scorecard, CMMI, KPI, COCOMO2

### Quality Tools

SonarQube, Squal, Kiuwan, Codacy, Klocwork, Coverity + opensource

### Innovation

Research promotion, Innovating ideas, Research project initiator

### Languages

French (Natural), English (C1), German (A2), Russian (A1), Italian(Beginner)

## SALT SA

Lausanne, Switzerland

SOLUTION ARCHITECT, FULLSTACK DEVELOPER

Mars 2020 - Mars 2021


- **Project : Modernization of the Payment Infrastructure**
- The Payment infrastructure handles all the payments at Salt and is integrated with **Datatrans**
- 4 Backends, 2 UI had to be migrated from Spring 2/Java 5 to Spring 5, Java 11 using Hexagonal Architecture
- **Java Backend migration** : Java 6/Open JPA -> Java 11/Spring Boot/Data
- **Frontend/Backend migration : Groovy/Play migration** : Play Framework -> Spring Boot/MVC/Thymeleaf
- **Frontend migration** : GWT -> SPA/Typescript/Webpack/JQuery
- **Automated testing** : Junit 5, Cucumber, Selenium

## Serial SA/ Mobilière

Nyon, Switzerland

SOFTWARE MODERNIZATION ARCHITECT, SENIOR SOFTWARE DEVELOPER

September 2019 - Mars 2019

-  **Fixed-term employment contract**
- **Project : Migration of 3 Legacy JBOSS/JSF Applications to Jboss 7.2**
- **Java Backend migration** : JBOSS 6.4->7.2, Java 6 to Java 11 Migration, Spring upgrade, Hibernate Upgrade and JBOSS Drools upgrade
- **Frontend migration** : Replacement of Primefaces to the latest version
- **Java Backend migration** : Java 8 to Java 11 Migration, Spring upgrade, Hibernate Upgrade and JBOSS Drools upgrade
- **Automated testing** : Junit 4, Cucumber

## FAVEEO SA

Lausanne, Switzerland

CHIEF TECHNOLOGICAL OFFICER

August 2018 - August 2019

- **Product Owner, AWS/Cloud Solution Architect, Fullstack developer**
- Design and development of an **AI prediction system** to detect viral newspaper articles (Java, Spring Boot, DeepLearning4j, Smile, Docker)
- Innovative system to generate Video using newspaper articles and AI (Vue.js, Spring Boot, RabbitMQ; Docker, MongoDB, Elasticsearch, OpenNLP)
- Automated AI generated mailing using Mailchimp, Elasticsearch and Java 11
- Event Architecture, Pipeline, Messaging using RabbitMQ
- Mail generation system using Node.JS, Java 8, Spring Boot and Mailchimp

## AZQORE SA 6 Credit Agricole

Lausanne, Switzerland

SENIOR SOFTWARE QUALITY MANAGER

December 2017 - August 2018


- Software quality and architecture auditor for 100+ developers (Cobol, Java)
- Mainframe and Mainframe middleware experience
  - Cobol code quality, tooling and review
  - Architect role for the project of a Java middleware to interconnect Java webapps with the mainframe.
- **Member of the Enterprise Architecture department**
- **Promotion of DevOps practices**, Software quality and cleancode
- Organizer of a **techlead community** inside the Bank

## SERIAL SA

Geneva, Switzerland

SOLUTION ARCHITECT, TECH LEAD

January 2017 - December 2017

-  **Fixed-term employment contract**
- *SERIAL SA is a famous company of 30 years old in Switzerland, delivering IT services. Its activities are focused on Web, ECM, Mobile, BI, Security, and Software Engineering expert skills.*
- **1st Trimester 2017 - GHI: Software Quality Assessment and Performance testing**  
Java, AngularJS, JHipster, Gatling, JMeter, SonarQube, Maven, Bamboo
- **2nd Trimester 2017 - GSK Novartis: JEE Tech Lead**  
Technical review of the project, technical migration and Java expertise  
Docker, Jenkins, Oracle, Java, Javascript, JSP, W4 Business Engine, Tomcat, Apache, Gradle, JIRA, Bamboo
- **TechTalk: Speaker**  
Why developers should care about quality ?
- **HSBC Private Banking: Technical lead**  
member of the Middleware team **delivery assessment**, technical review, devops best practices evangelization, international environment and offshore teams (India,China)  
Spring / Javascript / Ansible / Maven / Apache Camel / SOA / REST

- Technical director for several product lines : Mainframe product, Software Factory product, DevOps product and Legacy Software migration products  
As the technical director, I was involved in many different activities (coding, testing, specification, roadmap etc on various technologies)
- **2013-2016 - Software Editor : DevOps Dashboard Solution** Solution of KPI and alert management for DevOps teams. It extracts data of their Software Factories and ALM Solutions.
- **Semester 2016 - Automated Refactoring/Migration of a Financial Editor product : Fircosoft** Automated migration with Metrixware Refactoring framework of the main product of a french TOP 10 Software Editor.
- Mainframe and Mainframe middleware experience  
Product owner of the Scort products that offers CICS / Screen middleware to plug Web and mobile apps on the mainframe  
Technical direct of the Cobos products : Cobol IDE for the Z serie.
- **2014-2016 - Senior Software Quality Auditor : Adminext/BearingPoint partnership** Main auditor for Software Quality assessment of public french administration and ministries  
**Functional audit** : As an auditor, I had to review the quality of the documentation, specifications, the precision of the software implementation based on the requirements of the customer.  
**Database/Scheme audit** : As an auditor, I had to review the quality of the database schema of different critical solutions according various best practices, 1-NF, 2-NF, 3-NF, data quality...  
**Test Automation** : As an auditor, I had to review the test strategy, the test quality and the good usage of the TDD, BDD methodologies as well as the completeness of their tests  
**Code quality** : As an SQA Expert, I had to select the appropriate tools to perform Code quality measures and technical debt diagnostic of the customer's software, and configure the quality profiles. Part of my work is to segregate the results to prioritize and classify the issues according different quality models as Sqale, ISO-9126...  
**Continuous Delivery** : As a DevOps coach, I am performing assessments of the build and the whole toolchain to build the customer's solutions basing my approach on methodologies such like the Continuous Delivery book, Twelve Factors approach...

## TOCEA

Rennes, Quebec

COFOUNDER AND CTO TOCEA/ECHOES LABS

Mar. 2011 - Jun. 2014

- *Tocea is an innovating company that provides refactoring source-to-source solutions to help the software editor to refurbish their legacy software in record time and budget*
- **Architect**, main developer for a solution of Code Quality analysis, competitor of SonarQube
- **Contributor to SonarQube ecosystem** : development of a SaaS solution for SonarQube to provide worldwide Quality benchmarks
- **DevOps Coach** for SoftAtHome, 60 Developers, 20 QA, **2012-2014**  
**Modernization of S@H Software Factory and build** : C/C++, Jenkins, CMake, Make, SonarQube, Coverity, Bugzilla, HP QC  
**Test Automation advisor**, and Requirements analysis : Testlink, CPPUnit

## INRIA/IRISA

Rennes

RESEARCH ENGINEER FOR SERENITEC (SECURITY, REFACTORING, INTERNET, TECHNOLOGIES) RESEARCH PROJECT

Septembre. 2007 - Sep. 2010

- **Main developer** of a new technology for the detection of **quality**, reliability and **security** problems in Web Applications
- Technical Lead of a research team (2 PhD, 2 Engineers)
- Code Quality tool development : C/C++, Java

## Extracurricular Activity

---

### Freelance

Switzerland

#### CONSULTANCY

2020

- Performance Audit for a Critical System of a Saas company
- Design and development of an automated Adobe FLEX to Angular 8/9 conversion tool
- Design and development of an automated RPG4 to RPG 8 conversion tool
- Java 5 -> Java 11 Software Modernization for a Land Defense Leader in France and Europe

### Freelance

Switzerland

#### DESIGN AND BUILD OF A MOBILE APPLICATION FOR A STARTUP PROJECT

2019

- Using React Native, backend Node.JS and Typescript

### Freelance for Thalès AVS

Switzerland

#### SOFTWARE FACTORY AND DEVOPS AUDIT

2019

- Software SDLC and Factory audit for the Thalès AVS Group

### Opensource Developer

Switzerland

#### SONARTSLINT, SONARESLINT PLUGIN

PRESENT

- Maintainer of the opensource SonarQube plugin SonarESLint.
- Contributor to some open-source projects.

#### HOBBIES

- Being a great father of 3 and a source of inspiration
- Hiking, Cycling, Cooking
- Learning Italian, Russian

## Honors & Awards

---

### INTERNATIONAL

- 2013 **Finalist**, Innovation award from the French Ministry of the Industry (Créadev)
- 2012 **Finalist**, Innovation award from the French Ministry of the Industry (Emergence)
- 2011 **Laureate**, Phar Fund laureate

Paris, France

Paris, France

Rennes

## Presentation

---

### Byoskill

Switzerland

#### KEY SPEAKER FOR THE SCALEUP 360 LEGACY IT EUROPE CONFERENCE

2020

- Big bang or iterative evolution : my hands-on experience.

### Byoskill

France

#### CLEANCODE TRAINER

2019

- Coaching and training of new Cleancode trainers

### OCTO

Lausanne

#### PRESENTER FOR OCTO

July. 2017

- Internal presentation : Why should we love our software ?

### SERIAL

Geneva

#### PRESENTER FOR SERIAL

Apr. 2017

- Internal presentation : Why code quality does really matter ? How to boost your dev skills.

### Metrixware : cross-company training

France

#### CLEANCODE TRAINER

2014-2016

- Cleancode course
- Design pattern course
- Automated testing course

## **Tocea : cross-company training**

France

JAVA/SPRING TRAINER

2012

- Java best practices
- SOA Best practices
- Java software optimizations

## **AFDEL**

Paris

PRESENTER FOR AFDEL/TECH IN FRANCE

Jul. 2012

- Diminuer sa dette technique : stratégie de migration ... - TECH IN France

## **INRIA Workshop**

Rennes

PRESENTER FOR INRIA WORKSHOP

Sep. 2007

- Source-to-source technics for Java software optimizations

# **Writing**

---

## **Blog Writer**

Switzerland

DIGITAL TRANSFORMATION REFACTORING

Jan 2017 -Now

- Blog on various subjects : Code quality, refactoring, Enterprise Architecture, Digital Transformation
- <https://sylvainleroy.com>

## **Main Writer**

France

SOFTWARE LEGACY: HOW TO SAVE THEM ?

Sep. 2016 - Dec. 2016

- WhitePaper on Software legacy and how to handle the technical debt

## **Main Writer**

France

SOFTWARE REQUIREMENTS : A COMPLETE GUIDE AND MARKET STUDY

Sep. 2015 - Nov. 2015

- Exhaustive WhitePaper on Software requirement domain and requirement software market