

Sylvain Leroy

SOFTWARE MODERNIZATION ARCHITECT, SENIOR FULLSTACK DEVELOPER

Chemin de Bérée 16B, Lausanne, Switzerland

□ (+41) 76-40-11-931 | □ job@sylvainleroy.com | □ https://sylvainleroy.com | □ sleroy0 | □ sylvain-leroy-byoskill

"Innovation is the right balance between risk and conservatism"



Summary

I am an experienced developer in many web technologies. My initial training emphasizes the notions of development quality and application security. My speciality is the ability to work **on large, very complex applications whose technologies need to be updated**. Consequently, I am the perfect person to work in companies with very different technological portfolios, both old and new, and whose objective is to manage technical debt and to modernise existing systems with the newest technologies.

In addition to my architectural skills, I am a skilled Java/Javascript/TypeScript developer.

Finally, I gladly and attentively coach the most junior developers and train them to become the elite developers of tomorrow.

Education

Google Cloud Solution Architect course Coursera - Feb 2020 - On going

Angular 2 Training NINJA SQUAD - Jan 2017

Compiler and Architecture Researcher/Master degree University of Rennes 1, France - Jun 2007-2004

Bachelor of Computer Sciences University of Rennes 1, France - Jun 2004-2002

Skills

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, Squale, Kiuwan, Codacy, Klocwork, Coverity + opensource

Innovation Research promotion, Innovating ideas, Research project initiator

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

Experience

SALT SA

SOLUTION ARCHITECT, FULLSTACK DEVELOPER

- **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

Lausanne, Switzerland

Mars 2020 - Mars 2021

Serial SA/ Mobilière

SOFTWARE MODERNIZATION ARCHITECT, SENIOR SOFTWARE DEVELOPER

- **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

Nyon, Switzerland

September 2019 - Mars 2019

FAVEEO SA

CHIEF TECHNOLOGICAL OFFICER

- **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

Lausanne, Switzerland

August 2018 - August 2019

AZQORE SA 6 Credit Agricole

SENIOR SOFTWARE QUALITY MANAGER

- 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

Lausanne, Switzerland

December 2017 - August 2018

SERIAL SA

SOLUTION ARCHITECT, TECH LEAD

- **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

Geneva, Switzerland

January 2017 - December 2017

METRIXWARE/TOCEA

STAKEHOLDER AND CTO METRIXWARE

Rennes, Nanterre

Jun. 2014 - Dec. 2016

- Technical director for several product lines : Mainframe product, Software Factorw 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 qualimetry 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

COFOUNDER AND CTO TOCEA/ECHOES LABS

Rennes, Quebec

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

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

Rennes

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 Qualimetry tool development : C/C++, Java

Extracurricular Activity

Freelance

CONSULTANCY

- 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

Switzerland

2020

Freelance

DESIGN AND BUILD OF A MOBILE APPLICATION FOR A STARTUP PROJECT

- Using React Native, backend Node.JS and Typescript

Switzerland

2019

Freelance for Thalès AVS

SOFTWARE FACTORY AND DEVOPS AUDIT

- Software SDLC and Factory audit for the Thalès AVS Group

Switzerland

2019

Opensource Developer

SONARTSLINT, SONARESLINT PLUGIN

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

Switzerland

PRESENT

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

KEY SPEAKER FOR THE SCALEUP 360 LEGACY IT EUROPE CONFERENCE

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

Switzerland

2020

Byoskill

CLEANCODE TRAINER

- Coaching and training of new Cleancode trainers

France

2019

OCTO

PRESENTER FOR OCTO

- Internal presentation : Why should we love our software ?

Lausanne

July. 2017

SERIAL

PRESENTER FOR SERIAL

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

Geneva

Apr. 2017

Metrixware : cross-company training

CLEANCODE TRAINER

- Cleancode course
- Design pattern course
- Automated testing course

France

2014-2016

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