

Engineering manager and technical leader Design and implementation of large IT applications

Experience

Cofounder and Lead architect

LesFurets.com

May 2008 - present

Founder, project leader and conference speaker

dOOv open source project

October 2015 - present

Software architect

Prima Solutions

September 2004 - April 2008

Senior software engineer

ILOG - JRules team

February 2003 - August 2004

Software engineer

ILOG - JViews Component Suite team

December 2000 - February 2003

LesFurets.com, Paris, France 2008 - present

LesFurets.com is the French leader of internet insurance comparison. The company is composed of 100 employees, including 35 engineers. *LesFurets.com* has been part of BGL Group since November 2010.

■ Cofounded the insurance comparison website *LesFurets.com*

LesFurets.com allows to compare and subscribe insurance from 100 companies and more than 1000 products for car, bike, health, house and loan. The website is used by 4 millions customers and deliver 3 millions quotes each year.

■ Created the **dOOv** framework

dOOv is an open source library that allows to write **type safe business rules** in Java or TypeScript DSL (Domain Specific Language). Business rules are auditable in each production environments by the business users in natural language.

■ Improved developement processes at *LesFurets.com* during 12 years

Lead multiple technical transformations over the years, relying on modular developement based on Java services, Apache Maven components, data model governance, continuous delivery process and DevOps practices that enable daily delivery of *LesFurets.com*.

■ Team build of 30 engineers

Recruitment process implementation including technical interviews, team organization and technical mentoring during the company's growth period. Creation of a technical grade scale for the engineering team.

July 2018
present

Lead front application architecture update based on **React/TypeScript**: migrate 3000 front business rules using **DSL** technologies and a **DDD** (Domain Driven Design) approach.
Rewrite in place the customer funnels and finally migrate all the business logic to the new React stack using a **dOOv** DSL.

December 2017
June 2018

Lead the data encryption strategy: identify users PII (Personally Identifiable Information) of the data-flow and **encrypt PII using AES-256** at the application level.
Extract all the secrets of the continuous delivery pipeline and use **Hashicorp Vault** to distribute them in the staging and production environments.

January 2014
September 2017

Lead the design and implementation of a new storage system based on the **Cassandra NoSQL distributed database** and **lambda architecture** concepts.
Fully rearchitecture the data-flow with micro-batch to allows real time data monitoring, BI and data history access of 3 millions quotes per year.

January 2012
December 2013

Full redesign of *LesFurets.com* **client architecture based on MDD** (Model Driven Developement). The new frontend UI use a runtime modeling approach, code to code generation and annotation processing to enforce code reuse and readable code patterns.

May 2008
November 2010

Cofounding Assuremieux.com an insurance comparaison service relying on a modular design to connect french insurers web services for quotes and subscriptions.

Prima Solutions, Paris, France 2004 - 2008

Prima Solutions provides standard-based software to support incremental transformation of existing Insurance IT systems into component-based Service Oriented Applications. The company was made up in 2008 of 40 employees, world wide, including 15 R&D engineers.

- **Designed and developed Prima Repository 5.0 Foundation**

Prima Repository provides an integrated suite of components that can be used to easily develop, deploy and manage SOA applications. It organizes assets for business domains to ensure maintainability and component reuse to incrementally build a repository of reusable services, based on legacy applications and new development.

- **Designed and developed Prima IBCS 5.0 model tooling**

Prima IBCS is an extensive insurance object model. It is the result of several years of R&D by insurance experts and object oriented specialists.

March 2007 April 2008	Created a new semantic plugins in Prima IBCS 5.1, the plugin is based on tag clouds (as editing paradigm for UML tagged values), and a fulltext search plugin with treemap UI results and tagging colors.
February 2007 July 2007	Migrated the Prima IBCS UML model from UML 1.4 to UML 2.0 / EMF . The migration includes the rewriting of a code generator based on MIA Generation and new MagicDraw validation plugins . Prima IBCS 5.0 has been greatly improved through a specific dependency analysis tools , detecting unintended references between UML packages.
December 2005 January 2007	Redesigned and developed the new Prima Repository 5.0 based on Prima Platform. The redesign is based on the implementation of a new repository API (JSR-170 inspired) , a management model, a basic bootstrap mechanism and isolates clearly the design (asset editing) and runtime (BPM and service engine) of the software life cycle. Data-persistence is completely updated through high performance XML files and XML schemas , to facilitate data exchange (import, export, staging mechanism), editing forms, refresh and merging mechanism.
August 2005 November 2005	Designed and developed the first code generator for Prima IBCS 4.2. The main goal of the code generator feature was to normalise the UML model thanks to a Magicdraw plugin and a automated model cartography built in an Excel spreadsheet .
September 2004 July 2005	Contributed to Prima Platform 4.x studio by improving workflow editor usability (drag and drop, validation panel, edition toolbar) based on ILOG JViews Component Suite. developed a deployment parameters mechanism to improve runtime staging and a proof of concept of a ILOG JRules integration .

ILOG, Paris, France 2000 - 2004

ILOG is a software vendor of enterprise-class software components and services. The company was made up in 2004 of 650 employees, world wide, including more than 150 R&D engineers. ILOG has been part of IBM Software Group since January 2009.

- **Designed and developed the BRES - Business Rules Execution Server**

This server-side application is a J2EE integration of JRules. It is based on JCA and JMX and allows deploying, executing and monitoring of business rules.

- **Designed and developed the JViews Workflow Modeler**

This application has been introduced in JViews 4.0 and packaged in a specific distribution named JViews for Workflow.

This editor allows to edit workflow diagrams described in XML.

- **Designed a light document/view framework** for developing applications that display diagrams.

January 2004 August 2004	Designed and developed the security and the clustering management of the BRES . Implemented the JASS security of the BRES model and the distribution of the JMX MBeans in J2EE clusters of BEA Weblogic 8 and IBM Websphere 5.
June 2003 December 2003	Designed and developed the management model and the web console of the BRES . This console allows to manage the BRES JMX model from a web browser.
March 2003	Designed and developed a proof of concept on rules execution monitoring . The demo shows how to integrate alarms and KPI in the ILOG JRules engine using the JMX technology .
February 2002	Developed a demonstration of a wireless application based on maps and routing computation . Implemented a J2ME/MIDP cell phone client and a J2EE application for displaying routes on a San Francisco map. The demonstration was shown at the JavaOne 2002 Conference.
December 2001	Developed a thin-client workflow-monitoring cockpit based on the JViews DHTML library. Implemented DHTML table and inspector components linked to a server side data model. The demonstration is visible on the JViews website.

How to Share the Business Logic in a Polyglot App Mixing Java and TypeScript

September 2019 **Oracle Code One** [BOF3570] - *San Francisco*

Application Secrets Deployment: Hashicorp Vault and the continuous delivery

June 2019 **Open R&Day** - *Paris*

How to Create a Fluent API DSL with Lambda Builders

April 2019 **Oracle Code** - *Roma*

October 2018 **Oracle Code One** [BOF5129] - *San Francisco*

DSL.using(Java).toGoBeyond(BeanValidation);

July 2018 **Oracle Code** - *Paris*

June 2018 **Open R&Day** - *Paris*

April 2018 **JDK.io** - *Copenhagen*

Ippon BBL - *Paris*

October 2017 **SoftShake** - *Geneva*

Goto Cassandra in 40 minutes

June 2018 **Cassandra Meetup** - *Paris*

DomainModel().stream()

June 2017 **Open R&Day** - *Paris*

March 2017 **Meta Conference** - *Peterborough*

January 2017 **Breizh JUG** - *Rennes*

October 2016 **Mars JUG** - *Marseille*

June 2016 **Geneva JUG**

Paris JUG

Chti JUG - *Lille*

March 2016 **Alpes JUG** - *Grenoble*

January 2016 **Tours JUG**

October 2015 **SoftShake** - *Geneva*

Lambda Architecture at LesFurets.com

March 2017 **Meta Conference** - *Peterborough*

April 2016 **Ippon Master Class** - *Paris*

Rock solid UI modeling using annotation processing

April 2013 **CodeGeneration** - *Cambridge*

Smart use of annotation processing

March 2013 **Paris JUG**

Multi device Content Display and a Smart Use of Annotation Processing

October 2012 **JavaOne** [CON11234] - *San Francisco*

APT - Annotation Processing Tool in a nutshell

June 2012 **BreizhCamp** - *Rennes*

DevOps story - Application configuration jungle

June 2012 **Paris DevOps User Group**

April 2012 **Devovx France** - *Paris*

Education

1997-2000	Ecole Supérieure en Sciences Informatiques - Sophia Antipolis - France Graduate Engineering School Engineering Degree, Computer Science.
1995-1997	Université de Franche-Comté - Besançon - France DEUG Science - Degree given for the first two years of university. Graduated 29/198.
1995	Lycée Jules Haag - Besançon - France Baccalaureate S (scientific subjects, equivalent to A level)

Languages

French	Native language
English	Fluent
German	Conversational

Personal

Photography, video recording and sports (especially mountain biking).