# Daniel Lavoie - Senior Java Developer

Fluent in French and English

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# A word about me

I'm a Montreal born Canadian currently living in Paris and working as a Java Architect Consultant for [Invivoo](http://www.invivoo.com/). I'm a functional and reactive programing enthusiast as well as a Docker fanatic. I work with a lot of different technologies ranging from traditional SQL system to distributed Elasticsearch clusters. I tend to focus on being fluent on as much technologies and methodology as possible in order to build myself a proper toolbox. This toolbox allows me to find the right tool for the right needs. I am a pragmatic worker focusing on time to market while still giving proper attention to maintainability and refactoring. I also give professional training sessions for [Ambient IT](https://www.ambient-it.net/) on subjects like [Spring Cloud](http://projects.spring.io/spring-cloud/) and [Elasticsearch](https://www.elastic.co/fr/products/elasticsearch).

I am an underground electronic music fan, Formula 1 follower, cigar taster and I have a serious problem with pizza. On the weekend you will find me riding my motorcycle or walking my weiner dog.

# Achievements

* Started as a Java Developer and ended Java Architect after 7 years of career.
* Designed an entire micro service rewrite for Exane Derivates Front Office Contribution system.
* [Spring Cloud](http://projects.spring.io/spring-cloud/) Contributor (Ranked #6 contribution in additions as of 2016-08)
* [Spring Framework](https://spring.io/) expert
* Reactive Programing enthusiast, specially [Reactor](http://projectreactor.io/) implementation.
* Java blogger for Invivoo. Posts available [here](http://blog.invivoo.com/author/daniel-lavoie/);
* Open sourced a modern lightweight ERP Solution for small business named [Kubik](https://github.com/daniellavoie/kubik).

# Some numbers

* Built a distributed stateless and reactive system broadcasting 200 000 realtime audited prices every day.
* Stabilized a buggy and legacy JEE application which allowed to scale down a  
  team of 20 developers to 6.
* Maintained an Exotic Product Referential allowing to price 20 000 exotics product with an in house business language.
* Deployed [Kubik](https://github.com/daniellavoie/kubik) within 2 Paris based businesses ([Dimension Fantastique](http://dimensionfantastique.com/) and [Librairie Fei](http://www.librairie-fei.com/)). Manages a 300 000 € yearly turnover.

# My toolbox

* Spring : [Spring](https://spring.io/), [Spring Boot](http://projects.spring.io/spring-boot/,) [Spring Cloud](http://projects.spring.io/spring-cloud/)
* Reactive Programing : [Reactor](http://projectreactor.io/), [RxJava](https://github.com/ReactiveX/RxJava)
* Netflix OSS : [Eureka](https://github.com/Netflix/eureka), [Hystrix](https://github.com/Netflix/Hystrix), [Zuul](https://github.com/Netflix/zuul)
* NoSQL : [Cassandra](http://cassandra.apache.org/), [Elasticsearch](https://www.elastic.co/fr/products/elasticsearch), [Mongo](https://www.mongodb.com/), [Redis](http://redis.io/)
* SQL : Oracle, PostgreSQL, MySQL, SQLServer, Sybase
* Software Factory : Git, Github, Gerrit, Maven, Gradle, Jenkins
* System : Docker, Windows, Linux, Ansible, AWS

# Work experience

## Invivoo (since 2015-08)

### Position

Senior Java Consultant

#### Missions

##### **Java architect at Exane Derivatives (since 2015-09)**

I joined Exane Derivatives as a Java Architect with the mission to rewrite their contribution system for their market making operation. The system had to price 2000 listed products in realtime and broadcast them to a Reuters gateway. Being in the middle of a legacy system, a lot of functional rules had to be handle by the contribution system. A micro service architecture has been adopted as the client wished to isolate each functional features of the contribution within separated loosely coupled processes.

I aimed for a Spring Cloud based architecture as we had limited resources and limited time for such project. I had to answer every aspect of the system including service discovery, high availability, configuration management and failover. Starting from scratch, I also had to setup the software factory for a continuous delivery setup. Some module like the market listener and the price broadcaster were event heavy and sensitive for performance. I used Reactor to adopt an elegant reactive event based programming model. Result is a clean separation between functional processing and event handling. Pretty much every audit in the system is trace in a clustered Elasticsearch, providing elegant and cheap KPI with Kibana.

Being an Elasticsearch referent at Exane, I also ended up helping the infrastructure team to setup a cluster for their logging needs.

##### Technologies

Java 8, C++, Spring Cloud, Reaktor, Elasticsearch, Oracle, AngularJS, Swing, Linux, Ansible, Gerrit, Reuters RFA, Reuters Context

## Société Générale Corporate Investment Banking (2013-08 to 2015-08)

### Position

Permanent Software engineer

#### Mission

##### Software engineer and release manager for Exotic Derivates Referential

I worked on the Exotic Derivatives Referential. The application held all the scripts definitions and pricing parameters required to price any Exotic Product scripted by Société Générale trading engineers. I was in charge of preparing any package for production. Being a legacy JEE application coupled to a complex ecosystem integrated with 10 other applications, lots of technologies were involved. System were interconnected with EJB 2.0, Web Services, Corba and file transfer. The application was buggy and complex, a large team of 20 developers was required when I joined. I managed to setup a proper software factory with automated tools to provide reliable development and integration environments. I also had to act on production issues and assist operational teams.

Meanwhile, has a Spring referent, I helped a feature team to finish an Exotic Product Event Management project for which they were late. I had to refactor their entire security handling with Spring Security as it was poorly implemented in the first place. I was also the only developer who could code web pages and javascript for the Front End.

Being fluent in English, I also ended up managing an off-shored team from India composed of 3 developers to build an automated HP Quality Center platform allowing users to build their custom non regression tests from a web interface.

##### Achievements

* Migrated the platform from Clearcase to Git.
* Got rid of the Ant build factory for a complex but better Maven build.
* Lowered the non regression test period of 6 weeks to 1 week.
* Stabilized and simplified the development on the platform contributing in scaling down the team to 6 developers.

##### Technologies

EJB2, Spring, SpringMVC, WebLogic, Oracle, Sybase, Corba, JQuery, HTML5

## Planaxis Canada (2011-04 to 2013-08)

### Position

Production engineer

#### Missions

##### Production engineer at Société Générale Corporate Investment Banking (SGCIB)

I left Montréal in 2011 to work as an expatriate for Planaxis Canada as an IT consultant. My mission was located in Paris at Société Générale.

I joined the Ops team of Production Services of SGCIB. I had to investigate technical incidents on the platform and coordinate interventions from dev and infrastructure teams. After 2 years, the platform had no more secret for me and I needed new challenges, I was offered to join the dev team of the Exotic Product Referential or lead the pre production team. I choose the first option.

##### Achievements

* Built the monitoring platform for production.
* Received a proposition to managed the pre-production team but chosen to join the development team of the Exotic Product Referential.

##### Technologies

Oracle, Gigaspace (NoSQL), Tibco EMS, Tibco RVD, Spring, Tomcat, WebLogic, Linux, Bash

## Groupe Informatique Colabor (2008-09 to 2011-04)

### Position

Software Developer

#### Missions

##### Technical Leader for Web Development

I joined Colabor right after school. I was recruited to help develop the operation software used by warehouse clerks. The web application accessed from a portable scanner device interacted with the internal ERP solution built with Oracle Stored Procedures. After taking the lead with multiple proposals that improved the software stability and developer experience, I was named technical leader. I had to design newest Java web application that were requested by customers from the Colabor network.

I left Colabor in the beginning 2011 as I felt the need to look up for an international experience.

##### Achievements

* Took lead of the web development team (4 developers).
* Built a Web Application for mobile terminal used by 300 warehouse workers 24/7. This in-house software replaced a legacy commercial solution that was licensed over 2 millions per year.
* Built from scratch the HR portal of Colabor (500 users).
* Designed and delivered a customer order web portal for Colabor.

##### Technologies

Java 5, Servlet, XHtml, Javascript, Oracle, Oracle Forms.

# Studies

### Institut Supérieur d'informatique 2006-2008

###### AEC - Programmation, réseautique et télécommunications

### Collège Maisonneuve

###### DEC (incomplete) - Technologies de l'électronique

# On the side

### Professional Trainer

I work with [Ambient IT](https://www.ambient-it.net/) as a trainer of subjects like Spring Cloud and Elasticsearch. I will travel around France once a month to give some 2/3 days training sessions.

### Spring Cloud Contributor

Spring Cloud is an easy to use and simple toolbox to build up small processes that can talk to each others. It leverage Spring Boot to answers your need regarding Service Discovery, Configuration Management, Distributed Tracing, Circuit Breaking, etc. I am currently ranked 6th contributor in terms of code addition.

### Kubik ERP System

I started Kubik as I couldn't find any lightweight ERP system for the book store of my girlfriend. Kubik ended up being a SaaS friendly piece of software. It handles supplier order reception, inventory, cash register, invoices, etc.

Backend end is built on Spring Boot and front end on Angular JS 1. New instances of the platform are deployed on demand with Docker. The software is currently used by 2 different book stores and manages a 300 000€ turnover yearly.

Rich sales reporting are provided with Elasticsearch and Kibana.