

Nicolas Rey

Scala / Spark Developer - Big Data

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Education

March 2018 **Deep Learning Training**, *University of Montreal*, Montreal.

This one week training consisted in a big introduction to deep learning, the mathematical concepts behind it, as well as several practical works.

Sept. 2014 **Spark Training**, *Lateral Thoughts*, Paris.

- Spark Core
- Spark SQL
- Spark Streaming

2008 - 2012 **École Centrale de Nantes - Software engineering specialization**, *Generalist engineering school*.

The *École Centrale de Nantes* is a well known French engineering school. It delivers a very wide ranging curriculum.

Languages

French Native

English Fluent (ToEIC : 885) *Working in English, internship in India (4 months), South-Africa (6 stays)*

Spanish Notions

Russian Notions

IT skills

Languages	Scala , Java, JavaScript, Bash (basics)
Big Data ecosystem	Spark , Kafka, HDFS, Cloudera
Scala ecosystem	Play 2!, Akka (basics)
Code management	SBT, Maven, Jenkins, Git, GitlabCI
Data bases	Cassandra, MongoDB, HBase (basics)
System	GNU/Linux, Ansible, Docker, Vagrant
Cloud Computing	Microsoft Azure

Experiences

2018 - Today **Scala/Java Software Engineer - Big Data**, *Lateral Thoughts*, Paris.

2012 - 2017 Consultant specialized in **Scala**, **Spark** development, and Big Data ecosystems.

6 years

- Advise clients regarding their needs
- Implementing solutions using Scala, Spark, Kafka and other tools in the ecosystem

Lateral Thoughts is what we today call a "freedom-form company"

- No chief nor hierarchy. Fully self organized
- Great cooperation, emulation et mutual aid between employees
- An expertise in Scala, Spark, and Big Data development

Environment : *Scala, Spark, Kafka, Cassandra, Hadoop, Scrum*

2018 - Today **Scala/Spark Software Engineer - Big Data**, *Renault Digital*, Paris, France.

8 months Development of a tool to trace parts, components and costs of cars with Scala and Spark.

- Advising about the architecture and technical solutions
- Implementation of the data processing using Scala / Spark (about 3 TB of volume)
- Data storage in HDFS, ElasticSearch and HBase
- Implementation of the APIs to expose our data using Scala / Play2!
- Practice of Test Driven Development (TDD)
- Devops role aswell to improve deployment, scheduling, code quality and monitoring of our apps

Environment : *Scala, Spark, HBase, ElasticSearch, HDP*

Company : *Renault Digital is a subsidiary of the Renault group gathering digital projects*

2017 - 2018 **Scala/Spark Advisor - Big Data**, *agileDSS*, Montréal, Canada.

11 months **Scala / Spark / Big Data** advisor.

I also gave two sessions of Spark Core training at Microsoft.

For my clients, my role consisted in :

- Helping them in the design of their Big Data architecture
- Implementing using Scala / Spark
- Strict practice of Test Driven Development (TDD)
- Training their employees in Scala, Spark, and the Big Data ecosystem

For the agency, mon role consisted in :

- Getting involved in the development of the Big Data practice
- Choosing the Big Data technology of reference
- Running most of the technical recruitment interviews
- Training employees to the Big Data practice and technologies

I have mostly worked with with Microsoft because of clients' choices.

Environment : *Scala, Spark, Microsoft Azure*

Company : *agileDSS is IT services company specialized in BI and advise around data*

2016 - 2017 **Scala/Spark Software Engineer - Big Data**, *Pages Jaunes*, Paris.

7 months Redesign the applications regarding audience data of Pages Jaunes with Spark

- Development of several applications to ingest and valorize data
- Building the software factory (Jenkins, Sonatype Nexus)
- DevOps : deployment with Ansible, pipeline of jobs with Jenkins
- Training the team to Scala, Spark, and to work with Agile methods

Environment : *Scala, Spark, HDFS, Cloudera, Avro, Parquet*

Project management : *Agile methods*

Company : *Pages Jaunes is a search engine of professionals. About 5 millions daily users.*

2015 - 2016 **Scala Software Engineer - Big Data**, Carrefour, Paris.

10 months Development of the real time data lake for Carrefour

- Ingestion in Kafka of multiple data sources
- Computing the data with Spark Streaming
- Normalizing the data in avro format
- Storage of the data in HDFS and Cassandra
- Development of APIs with Spray to access the data
- The platform was splitted between a Mesos cluster and a Cloudera cluster

Environment : *Scala, Spark, Mesos, Akka, Cassandra, Kafka, HDFS, Cloudera, Spray, Avro*

Company : *Carrefour is a major big distribution company. 5600 retail stores in France.*

2014 - 2015 **Scala/Java Software Engineer**, Vidal, Paris.

1 year Software development for the medical drug industry

- Development of a tool in Scala and Akka to manage updates of a heavy client
- Development of HATEOAS RESTful APIs on a medical database
- Development of a BDD testing project with Cucumber

Environment : *Scala, Java, Akka, Guava, Spring, Hibernate, Cucumber, Github, Docker*

Gestion de projet : *Agile methods / Scrum*

Company : *Vidal is the French leader of medical drug data.*

2014 **Java Software Engineer**, SACEM, Paris.

9 months Redesign of several declaration and payment web sites

- Backend development in Java and Spring. Heavy use of Guava.
- Frontend development in JavaScript and ReactJS
- Interface testing with Fluentlenium
- Development of a tool with RabbitMQ in order to handle the underlying database unavailability
- Use of Git and Jenkins for code management

Backend Environment : *Java, Guava, Spring, Fluentlenium*

Frontend Environment : *JavaScript, ReactJS*

Gestion de projet : *Agile methods / Scrum*

Company : *SACEM is the company in charge of collecting and redistributing music copyrights in France.*

2013 **Scala Software Engineer**, FONTYOU, Paris.

7 months Development of a web application dealing with font co-creation

- Development of the APIs with Scala, Play2!, MongoDB
- Development of the frontend with JavaScript, BackboneJS, CSS3
- System administration of the software factory and the production environment
- Development of a proof of concept for vectorial drawing inside a browser

Backend Environment : *Scala, Play2!, MongoDB, Zabbix*

Frontend Environment : *JavaScript, BackboneJS, RequireJS, HTML5/CSS3, LessCSS*

Gestion de projet : *Agile / Scrum*

Company : *Fontyou is a startup which at the time was working on a social network of font co-creation.*

Personal projects

2019 **Spark Tools.**

Development of a SourceManager to abstract the reading/writing of sources and the creation of a Hive table. Adds several very useful SaveMode.

2019 **Slack Notifier for Yarn projects.**

Development of a simple notification tool implementing the Slack Incoming Webhooks API, and specialized to post status of applications.

2017 **Docker image for TaigaIO.**

Creation of a Docker image for the *taiga.io* software. TaigaIO is a simplified tool for task management oriented to Agile methods.

2017 **Docker image for Azkaban.**

Creation of a Docker image for the *Azkaban* software. Azkaban is a workflow manager developed by LinkedIn.

2015 **Personal Server.**

Installation of a development server with Ansible
Ansible, Nginx, OwnCloud, GitLab, Linux Debian

2015 **Personal Computer.**

Automation of the install and configuration of my own personal computers with Ansible

Interests

IT Free and open source softwares, functional programming.

Hobbies Salsa and other dances, Paragliding, Photography, Geopolitics, Good food.

Travels 17 years in Libreville (Gabon), Road trips in Europe (11 countries), 4 months in India.