

Pierre Besson

Full-Stack and Dev-Ops Software engineer

Software Engineering Skills

Development

Back-end development	Java, Spring, Spring Boot, Spring Cloud, Netflix OSS, JUnit, Mockito, Node.JS
Front-end development	JavaScript/Typescript, Angular, React, JQuery, Bootstrap, HTML, CSS, Webpack, Jest
Data persistence	SQL (MySQL, PostgreSQL), JDBC, Hibernate, Spring Data, Cassandra
Tooling	Maven, Gradle, NPM, IntelliJ, JHipster
Distributed systems	REST, SOAP, Websocket, GRPC, Kafka

Operations

Containers	Docker, Kubernetes, Istio
System administration	Linux, Bash, SystemD, Ansible
Cloud	AWS, GCP, Terraform, Packer
CI/CD	Jenkins, Gitlab CI
Monitoring	ELK, Prometheus, Instana
Security	Vault, Cloud IAM, LetsEncrypt

Professional Experience

Liquidshare

June 2019 - Present **Site Reliability Engineer**, *Liquidshare*, Paris, Blockchain-based platform operations.

Day to day tasks :

- Manage the Liquidshare platform running on cloud providers (AWS, GCP) using Terraform including cloud managed networks (VPC), container orchestrator (Kubernetes), service mesh (Istio), database (PostgreSQL), message queue (Kafka).
- Manage the CI/CD infrastructure : Gitlab, Jenkins, Nexus, Build runners
- Develop custom tooling for continuous deployment using Kotlin, Go and Python
- Maintain the individual deployment pipelines for over 20 java based microservices and several UIs deployed in Kubernetes over 4 environments (dev, qa, uat and prod).
- Manage the operations of a blockchain cluster based on Hyperledger Besu.
- Implement security best practices including secret management (Vault), encryption at rest and in transit, vulnerability scanning, policies enforcement and firewalls.
- Handle production incidents.

Significant contributions :

- Developed a CI/CD pipeline for solidity smart contracts deployments and upgrade (node.js, openzeppelin, Gitlab CI)
- Developed a fully automated hotfix process utilizing webhooks and deployment pipelines to help developers go from a JIRA ticket to the safe deploy of a hotfix code patch in production.
- Deployed a production Hashicorp Vault cluster to GCP following best practices and implemented a secure set of Vault policies suitable for Liquidshare use of the tool (secret management, transit encryption).
- Deployed a monitoring infrastructure using Prometheus, Alertmanager and Grafana to monitor blockchain nodes.

Consulting work for Ippon Technologies

- May 2018 - **Full-stack developer**, *Renault Digital*, Microservice architecture and AWS.
- May 2019 Development of a car configurator platform (back-end + front-end) for use on the car maker main website for the following brands: Renault, Dacia and Alpine.
- Development of Spring Boot back-end microservices to expose a simple car configuration API from the aggregation of various internal APIs
 - Development of a React front-end using our APIs and integrated with the AEM (Adobe Experience Manager) CMS.
 - Development of AWS Lambda functions to carry out batch processing workloads
- July 2017 - **Full-stack developer**, *Tessi Document Services*, JHipster microservice architecture.
- May 2018 Development, deployment and supervision on a case management solution built around the Tessi EDM (Elelectronic Document Management) in the context of paper mail digitization for a major French insurance company (tens of thousands mails digitized and handled every day on our platform).
- Back-end and front-end User Stories development
 - Integration with the proprietary Tessi Datacontent EDM engine (based on Cassandra) and JBPM for workflow management
 - Configuration management with Ansible and continuous deployments in production with no service interruption
 - Exploitation of the open source "JHipster Console" (ELK Stack + Zipkin) monitoring solution which I developed and allowed us to achieve observability (logs, metrics and traces) of our microservice architecture.
- Sept. 2016 - **Full-stack developer**, *Paris Turf*, Microservice architecture on Kubernetes.
- June 2017 Development of a horceracing totalisator for an online betting website.
- Development of Spring Boot based microservices communicating with each other using REST
 - Development of an AngularJS front-end for the operational back-office
 - Contribution to setting up Continuous Integration with Jenkins
 - Deployment of the microservice stack as Docker containers on Kubernetes
 - Handling of production incidents

Internship & Student projects

- Jan. 2016 - **Software Engineering**, *Ippon Technologies*, JHipster R&D Internship.
- July 2016
- Contributions to the JHipster project, an open source code generation tool to create Spring Boot + AngularJS application
 - Participated in the design and implementation of microservices patterns in JHipster using Spring Cloud, Netflix OSS, Docker and creation of a monitoring solution based on the ELK stack.
 - Initial development of the DataMC console using JHipster: an administration console to drive the Big Data managed service offering by Ippon
 - Integration of the application with a container orchestration platform based on Docker Swarm and Consul
- Jan. 2015 - **ISO 9001 Certified project for CHU de Rouen**, *INSA de Rouen*, Rouen, Normandy,
- Dec. 2015 JHipster & DataMC.
- Creation of a RESTFUL API and a Responsive front-end to modernize the main French medical documents search engine (doccismef.chu-rouen.fr)
 - University project assigned to a group of 7 students representing 25h of work per week for 2 semesters
- June 2015 - **Software development internship**, *Bancom IT Co. Ltd*, Shenyang, China.
- August 2015
- Participation to the development of a CRM platform for use by universities in Liaoning Province (North-East China)
 - Developed my ability to adapt to a different culture and work environment (a Chinese SME)

Education

- 2016 **Engineer Degree**, *Information Systems Architecture*, INSA de Rouen, Normandy.
- 2013 **Integrated Preparatory Cycle**, *Science and Technology for the Engineer*, INSA de Rouen, Normandy.
- 2010 **Scientific Baccalaureate**, *Lycée Auguste Renoir*, Asnières-sur-Seine.

Public Speaking & Given Trainings

- October 2019 **VoxxedDays Microservice**, Speaker for the conference: *Kubernetes native JHipster microservices*.
- January 2019 **Ippon Technologies**, JHipster Masterclass training (one day).
- October 2018 **VoxxedDays Microservice**, Full day workshop on Spring Cloud microservices.
- April, June, **Devboxx France, JHipster Conference, VoxxedDays Microservice**, Speaker for a tools in action session: *Monitoring a JHipster microservice architecture in practice*.
- October 2018
- October 2017 **Paris JHipster Meetup**, Speaker on *JHipster microservices in practice from dev to prod*.
- October 2017 **BreizhCamp, Rennes**, Speaker on *Introduction to JHipster 4*.

Languages

- English Fluent (TOIEC score: 960)
- French Native
- Chinese Proficient (HSK level 4)
- German Basic