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GOAL

I intend to help developer teams to deliver **high-quality** products that add **value** to the customer.

SELECTED WORK



Mar 2019 — 2020

AWS Cloud Migration, cloud architect and lead. Migrated, from scratch, the company's infra into the cloud. Currently hosting more than **20 platforms** among production and UAT. Chose **AWS EKS** and provided a technical and financial study to support my decision. Cut \$400/month in the bill by implementing a custom **NGINX Ingress to replace the AWS ELB**.

Implemented a PaaS solution with **CI/CD** providing similar features as **Liferay Cloud Platform**. Orchestrated the builds and deployments with **circleci**. Optimized the pipeline execution time and added a notification system that maximizes the developer's productivity. Used **kontemplate** to set up an isolated namespace dedicated to DEV and QA teams.

Technologies. Kubernetes AWS EKS Route 53 Python Node ShellScript



lan 2019 — Mar 2019

Portail Emploi, architect and tech lead. Managed a team of 5+ developers, among freelancers and internals, and delivered the first MVP version in less than a month.

Used **JHipster** to accelerate the development cycles. Advocated for the use of **OpenAPI Specification** on the exposed and consumed APIs such as the **emploi store API**. Decoupled the project in smaller components, distributed them, and assured the quality of the work produced. Assembled the final project in a **SPA** inside Liferay CMS.

Technologies. Liferay 7.x | Springboot | Java 8 | React / Redux



Oct 2018 — Jan 2019

Jobextra 31, lead a team of 6+ engineers to refactor and evolve Jobextra, an application designed to simplify the recruiting process. I shifted the architecture from a single tier to multiple tiers that support 50k+ connected users and over 100K concurrent offers.

Created a dedicated frontend in AngularJS that manages the jobs posted through a Facebook group. Increased the number of users by 96% using oauth2 protocol (login with FB). Used a nodeJS with typescript running on top of expressjs as a backend server and integrated with **Graph API** to fetch user information. Used **Amazon Cognito** to create user pools dedicated to the UAT environment.

Technologies. NodeJS AngularJS Facebook Graph API AWS Cognito MongoDB



2017 — 2018

Firebase Realtime Database

Mercedes-Benz.io Lead developer, mainteined and evolved the **Test Drive Application**. Reduced the leads lost rate to under zero implementing fault tolerance and asynchronous processing mechanism with RabbitMQ and Amazon SES. Reduced

Ehcache.

Rolled out the application every two weeks into more than **25 countries**, I managed the releases contents and routinely presented the application evolutions and the

the page loading time from 3s, sometimes up to 10s, to 1s by using Hibernate

the releases contents and routinely presented the application evolutions and the roadmap to the top-level management.

Implemented from scratch a back-office application with similar features of

Technologies. Spring Boot CloudFoundry Vue AngularJS Kotlin RabbitMQ Docker

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2016 — 2017

Commerzbank. Designed and implemented the Enterprise Service Bus of a home banking application that handles 5K+ queries per second. Implemented operations like login, list statements, upload documents, among others.

Implemented a custom two-phase commit protocol to assure that operations like immediate transfers could be performed.

Technologies. Red Hat JBoss Fuse | SwitchYard | Apache Camel | WSDL | SOAP



2015 - 2016Reengineered EJBCA to be used as the first Portuguese Root Certification Authority. From a project with more than 37 modules and 322K LOC, I changed the

building tool from Apache Ant to Maven. I ended with all errors caused during manual installation by automating it with scripts.

Redesigned the front-end using PrimeFaces, and reduced the time to generate a certificate from 4.5s to 2.1s by improving the lock mechanism.

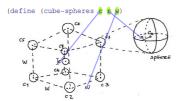
 $\textbf{Technologies.} \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \, | \ \,$



Adapted a Digital Certificate eCommerce for physical stores and deployed it at more than 300 CTT post office stores.

I optimized the UX/UI experience for tablets and terminals. I exposed a REST endpoint and integrated the barcode 128 algorithm, so the operators could use the scannner to retrieve the certificate price.

Technologies. JEE 6 Java 7 Spring Web Flow JSP C JBoss AS 7



@ INESC-ID Lisbon Rosetta. Empowered Rosetta environment with a code playground where users can create their designs by interacting with the code.

Initiated, designed, prototyped, and implemented programming tools such as the sketch-correlation tool which correlates image with code illustrating the intent of each piece of code.

Technologies. Racket (Lisp) | DrRacket (IDE) | AutoCAD API | Rhinoceros 3D API | OpenGL

EDUCATION



2013 - 2015

IST. MS in Information Systems and Computer Engineering.

Thesis: An Enhanced Programming Environment for Generative Design. I invented a programming environment where architects can implement their sketches, share the code, and create systems. I provided a theoretical foundation and implemented novel programming tools tailored to the generative design domain. Those tools were used in an architectural course by more than 60 students.

IST. BS in Information Systems and Computer Engineering.