

## SOFTWARE ENGINEER

### SKILLS & ABILITIES

Software engineer interested in functional coding style in an agile environment. Building large robust distributed applications with elegant user interfaces.

#### Programming languages

- Scala / Haskell
- Typescript / Javascript / Purescript

#### Technologies

- Postgresql, OracleDb
- Elasticsearch
- Kafka
- React / Redux
- and more ...

#### Others

- Functional programming
- TDD, CI & CD
- Git

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### EXPERIENCE

Comfortable working according to agile methodologies focused on delivering value. Relentless learner. I'm interested in functional programming and working to improve my skills. I have a passion for building robust systems that offer great user experiences and I'm willing to work with a team that is passionate and full of energy for the job.

**Blitworks** 2016-2017

#### Agilogy

**Coeli** 2017-2018

**Mango** 2018-2019

**Stuart Delivery** 2019

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### PROJECTS

#### 2016-2017 - ANDROID/IOS DEVELOPER

A top national refrigeration regulation and control solutions company needed to develop a smartphone application for their technicians and end-users to control several kinds of cooling systems with a unified and cross-platform application.

The key point in this project, apart from creating an interface to communicate with the microprocessor of each cooling system, was to build a metamodel that was easily

modified in order to adapt it to new cooling systems.

My main task in the project consisted of developing the Android application based on designs provided by the client and create all the infrastructure behind the application that updated the metamodel, authenticated users, shared information between users and stored their credentials and personal information. I also worked in several modules of the iOS application.

We built a native Android application on Java 8 and android API 25 based on the clients design. A JavaEE server deployed in Apache Tomcat contained in a Docker's container for the REST services.

The communication interface was Bluetooth Low Energy that was released one year before. The communication protocol with the processor was MODBUS. The metamodel was contextualized in JSON and binary files. All data was stored and centralized in a PostgreSQL database.

## **2017-2018 - JUNIOR FULL STACK DEVELOPER**

An established GLAM (Galleries, libraries, archives and museums) consultancy asked us to create a cloud platform for documentation and diffusion of private collections. This platform allows the final client to make its collection visible to the world through the cloud, create and maintain the inventory in an elegant and intuitive environment and document, manage and validate several working processes in a transparent way among different sectors of the institution.

My main task in the project consisted of creating features for the platform that was already in a production stage. Being my first project in Scala and React I was able to understand the project as a whole and implement new features combining the resources we had.

We delivered a functional API based on Scala with Play framework and several other libraries and with the support of a PostgreSQL database, an analytic engine Elasticsearch for real-time related terms queries and an Amazon S3 for cloud storage for all the visual data such as pdf and pictures.

We built a Javascript/Typescript client based on NodeJS/React/Redux which allows the user to perform all the mentioned operations and more such as importing collection from CSV to the platform.

Our tests were developed in every module to guarantee the quality of the system after the attachment of the new feature. Additionally, we configured Jenkins to compute more exhaustive tests.

Our development workflow followed an agile process delivering measurable progress every week.

## 2018-2019 – FULL-STACK CONSULTANT

Mango, a clothing design and manufacturing company, hired us to help in the task of the decoupling of the old monolithic server into micro-services divided by domains. Meanwhile working on this task, we also help their teams to improve. This improvement is achieved by several ways. For example, with TDD in local environments or introducing remote working.

We adapted our stack of technologies to work with the technologies they are used to. Instead of Scala we are working on Java 8 taking advantage of all functional and immutable features. For the frontend we are working on React.js with typescript.

## 2019 – BACKEND/DATA ENGINEER

Stuart Delivery is a flexible and independent delivery platform. My task as a data engineer is to build, upgrade and maintain the tools that serve as the core of the system. Our core tool is responsible of resolving a Vehicle Routing Problem (VRP) in a concurrent and distributed way.

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### EDUCATION

University Degree in Computer Engineering from the Technical University of Catalonia (UPC-Barcelona Tech). Graduated in 2017 and worked in software development since then.

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### LANGUAGES

Catalan – Native  
Spanish – Native  
English – Very Fluent