

# Abstract

Within MobiGIS<sup>1</sup>, publisher of GIS and Transport software and geomatics service company, I joined the Research & Development "MobiSAAS" project.

My internship subject focuses on developing web services that expose functionalities of road and transit data import, for automatic build of multi-modal transport networks.

The objective of my work is to expose functionalities originally coded in SQL and/or Python language via a REST API in Java (JAX-RS). So I initially took over the business treatment (Python) and learned to manipulate data (PostGIS/SQL) via the "DataWizard" project. In the same time, in order to implement these web services I joined the "MobiSAAS" project and so learned to develop with the "Dropwizard" framework.

The developed application of this project presents like a SAAS<sup>2</sup> the main features of MobiAnalyst Desktop software. It is in the context of the administration interface (backend) I develop features to upload transit data (GTFS). The prospects of my work will be to generalize the utility classes and methods I have developed so that the application could support multiple data formats of other transport data format (vector data "Shapefile" for example).

During this internship I worked on several projects : MobiSAAS, DataWizard, Crislab, etc... So I participated in various phases of software development lifecycle : from the design ( R & D), to development of business code, until delivery to the customer.

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1. <http://www.mobigis.fr/>

2. [https://en.wikipedia.org/wiki/Software\\_as\\_a\\_service](https://en.wikipedia.org/wiki/Software_as_a_service)