

# Raffaele Bua

## Portfolio

### Satellite Image Processing Platform

October 2016 to Present

#### Description

Open Source plugin based platform able to download and process EO satellite data. It is written in Python and C++. Downloads and Processes are multithreaded and schedulable. The Platform is configurable and the processor is extendible via C++ plugins.

#### Responsibilities

Software Architect, Software Developer.

#### Technologies

Python 3.4, C++, GDAL library, SQLAlchemy ORM, Flask, Postgresql, Supervisord, Valgrind, Nginx, Docker, Docker Compose.

#### Link

Documentation: <https://goo.gl/tNBcY0>

Source code: <https://goo.gl/snTyBk>

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### Sentinel-2 satellite products ingestion for Data Hub System

May 2015 to Present

#### Description

Module of Data Hub System to ingest Sentinel-2 satellite products, to map products metadata in Solr indexes providing full text search.

#### Responsibilities

Software Developer.

#### Technologies

Java, OWL, Solr, Xquery.

**Link**

code: <https://goo.gl/P4Tqt9>

portal: <https://goo.gl/M2sxM7>

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## Satellite Data Hub - Web Components Application

September 2015 to Present

**Description**

Full-stack web application with client SPA, developed using modern web technologies, modular, dynamic and extensible. Exploiting web components (Polymer 1.0).

**Responsibilities**

Software Architect, Lead programmer in team of three people. Customer relations.

**Technologies**

MVC, Web Components, ECMAScript 6, Javascript, Polymer 1.0, Java, Spring, RESTful Design patterns.

**Link**

source code: <https://goo.gl/3v4sBv>

documentation [draft]: <https://goo.gl/FFWE2Q>

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## Weather stations network backend

June 2014 to Present

**Description**

Sardegna-Clima Non Profit Organization backend platform to store the history of measures from Sardinian weather stations network.

**Responsibilities**

Software Architect and Software developer.

**Technologies**

PHP 5, Slim Framework, Doctrine (ORM), MYSQL.

## Link

source code: <https://goo.gl/3zHcNV>

web client: <https://goo.gl/2KVvi8>

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# Near real time weather measures Android App

June 2014 to Present

## Description

Sardinia weather Android application. *Sardegna Clima Pro* provides the measured weather parameters from more than 70 stations installed around Sardinia with real-time updates.

## Responsibilities

Software Architect, Team leader, Software developer.

## Technologies

Android, Apache Cordova, AngularJS, Bootstrap.

## Link

app: <https://goo.gl/SAKgQu>

code: <https://goo.gl/ym9TmE>

web: <https://goo.gl/2KVvi8>

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# Book Explorer (Open source iOS App)

April 2014 to Present

## Description

Book Explorer is an open source iOS App to discover books and authors, using google firebase api.

## Responsibilities

Software Architect, Software Developer.

## Technologies

XCode - Objective-C - Google Firebase APIs - Git - Github.

## Link

<http://goo.gl/FJlIRE>

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## eMailChef

June 2013 - November 2014

### Description

Email Marketing Service Platform (like *MailChimp*).

### Responsibilities

Software Developer.

### Technologies

PHP 5 Slim Framework, Mysql, AngularJS, Bootstrap.

### Link

code: <http://emailchef.com/>

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## Turbo smtp Dashboard

March 2013 to May 2013

### Description

SMTP service admin panel.

### Responsibilities

Software Developer.

### Technologies

RESTful, SPA, MySQL, nodejs, expressjs.

### Link

<http://goo.gl/ST1UMC>

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# Gente Veneta Backend web services

June 2011 to August 2011

## Description

Backend web services for *Gente Veneta* mobile application, to manage, purchase, download *Gente Veneta* volumes.

## Responsibilities

Software Developer.

## Technologies

Java, MySQL.

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# Navionics Rating and review system

April 2011 to July 2011

## Description

Rating and review system for the Navionics Navigation app.

## Responsibilities

Software Developer.

## Technologies

Objective-C, C++.

## Link

<http://goo.gl/d7Qel2>

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# Navionics Tide prediction system

March 2011 to April 2011

## Description

Tide prediction feature for iOS Navionics Mobile App.

## Responsibilities

Software Developer.

## Technologies

Objective-C, C/C++.

## Link

<http://goo.gl/d7Qel2>

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# Ledout

November 2012

## Description

E-Commerce portal.

## Responsibilities

Software Developer.

## Technologies

PHP 5, Symfony.

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