# Raffaele Bua

Portfolio

# Satellite Image Processor Platform

September 2015 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

Project Manager, Software Architect, Software Developer

### **Technologies**

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

#### Link

Official documentation: <a href="https://goo.gl/tNBcY0">https://goo.gl/tNBcY0</a>

Source code: <a href="https://goo.gl/snTyBk">https://goo.gl/snTyBk</a>

# Satellite Data Hub - Application

September 2015 to Present

### **Description**

SPA web application developed using modern web technologies, modular, dynamic and extensible. Exploiting web components.

### Responsibilities

Software Architect, Lead programmer in team of three people. Customer relations. Full-stack Developer.

### **Technologies**

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

#### Link

source code: <a href="https://goo.gl/3v4sBv">https://goo.gl/3v4sBv</a>

architecture documentation: <a href="https://goo.gl/FFWE2Q">https://goo.gl/FFWE2Q</a>

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

May 2015 to Present

### **Description**

Addon of Data Hub System to ingest Sentinel-2 products, To map metadata of products with Solr indexes, to provide full text search.

### Responsibilities

Software Developer

### **Technologies**

Solr, OWL, java, Xquery

#### Link

https://goo.gl/P4Tqt9

# Sardegna Clima 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/SAKqQu

# 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 freebase api.

#### Responsibilities

Software Architect, Software Developer

### **Technologies**

Design and Develop iOS App - XCode - Objective-C - Google Freebase APIs - Git - Github

#### Link

http://goo.gl/FJjIRE

# Sardegna Clima Backend Platform

June 2014 to Present

### **Description**

Sardegna-Clima Onlus Backend Platform to store the history of measures from Sardininan weather stations.

### Responsibilities

Software Architect and Software developer

### **Technologies**

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

#### Link

https://goo.gl/3zHcNV

# eMailChef

June 2013 - November 2014

### **Description**

Email Marketing Service Platform.

### Responsibilities

Full-stack Web Developer.

### **Technologies**

PHP 5 Slim Framework, Mysql, AngularJS, Bootstrap

Link

code: http://emailchef.com/

# Turbo smtp Dashboard

March 2013 to May 2013

### **Description**

SMTP service dashboard.

### Responsibilities

Full-stack Web Developer

### **Technologies**

RESTful, SPA, MySQL, nodejs, expressjs

#### Link

http://goo.gl/ST1UMC

# 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 volume.

### Responsibilities

Backend software developer

### **Technologies**

Mysql Developer - Java Servlet Developer

### Link

http://goo.gl/BPNohZ

# Navionics Rating and review system

April 2011 to July 2011

### **Description**

Rating and review system for the Navionics Navigation app.

### Responsibilities

iOS Developer

### **Technologies**

Objective-C, C++

#### Link

http://goo.gl/d7Qel2

# Navionics Tide prediction system

March 2011 to April 2011

### **Description**

Tide prediction feature for iOS Navionics Mobile App.

### Responsibilities

iOS Developer

## **Technologies**

Objective-C, C/C++

### Link

http://goo.gl/d7Qel2

# Ledout

November 2012

### Description

E-Commerce website to sell led lights.

### Responsibilities

Fullstack web developer

### **Technologies**

PHP 5, Synfony

# Open source project management

March 2015 to Present

## Description

Space data dissemination open source project infrastructure maintenance and development.

### Responsibilities

Engineer

### **Technologies**

GITHUB, Jekyll, Java, Maven, Nexus OSS, Apache, Jira

### Link

http://goo.gl/IKDyzu