

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>

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>

ESA Data dissemination SPA client

November 2015 to Present

Description

SPA Web client of ESA Data Hub System, based on RESTful APIs, following MVC design pattern. Agile Software development.

Responsibilities

Software Architect, Software Developer

Technologies

AngularJS, Bootstrap, Javascript, grunt, npm, bower, RESTful, Java, Spring.

Link

Online application: <https://goo.gl/M2sxM7>

Source code : <https://goo.gl/xWE0EQ>

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>

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>

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>

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

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

Link

<http://goo.gl/FJlIRE>

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/>

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>

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.

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>

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>

Ledout

November 2012

Description

E-Commerce portal.

Responsibilities

Software Developer.

Technologies

PHP 5, Symfony.
