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

Official documentation: https://goo.gl/tNBcY0
Source code: https://goo.gl/snTyBk

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.

Technologies

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

Link
source code: https://goo.gl/3v4sBv
architecture documentation: https://goo.gl/FFWE2Q

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 satellite 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 Backend Platform

June 2014 to Present

Description

Sardegna-Clima Onlus 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

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/SAKgQu
code: https://goo.gl/ym9TmE

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/FJjlRE

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.

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

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 website to sell led lights.

Responsibilities

Software Developer.

Technologies

PHP 5, Synfony.