

TIAGO FASSONI

PROGRAMMER AND DATA SCIENTIST

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São Paulo, Brazil

Some Recent Projects

Collaborative discussion platform for Points of Interest

My team won a public grant to make a platform where people could take pictures for collaborative mapping of public points of interest and online discussion with participation from the City Hall. I was responsible for programming the platform and making it reusable for other projects.

Website with several Open Data Analysis (in Portuguese)

There is a lack of Data Journalism in Brazil, one of the reasons being illiteracy to the data programming ecosystem. I created a website, <https://cappuccino.works>, showing different angles of public datasets. I made a point of publishing all the code used to make the analysis, and the datasets in a queryable format, so they can be easily reproduced, and easily understood by journalists. So far, the plan is working, several independent journalists used the website as a source.

Crawl of São Paulo Land Records Database

The Land Records in São Paulo are public domain, but hidden in obnoxious web systems. I created crawlers to open the dataset the hard way. There were attempts to block my crawlers (with IP blocks and CAPTCHAs), but I dodged them (also found a bug in the CAPTCHA implementation). The crawl allowed data-driven reports in local independent journalism and a collaboration with Transparency International.

Collaborative mapping of São Paulo bike lanes

When the City Hall made a network of bike lanes, there was no way to route through them. Besides lack of software, we had a lack of data. As a developer in Mobilab and a local bicycle activist, I partnered with Citymapper and Mapillary to map them in OpenStreetMap. I ended Mapillary's Brazil ambassador and I'm making with São Paulo's Ciclocidade a map of friendly routes (not necessarily in bicycle lanes) in São Paulo using OpenStreetMap

Professional Experience

Cappuccino Works

Developer and Data Scientist

11/2015 - nowadays

Projects involving data science, GIS, web and mobile programming for local and foreign NGOs and companies. Some of my clients were Transparency International, Digital Democracy and São Paulo's Ciclocidade

MobiLab

Lead Software Developer

10/2015 - 11/2016

MobiLab is a laboratory, inside São Paulo City Hall, of technology applied to urban mobility. Acted as lead developer and scrum master for two projects: A bicycle routing app and smartphone app for fining offending drivers. Also made the organization's website, a fully responsive and blind-accessible website for public consultations of urban infrastructure, the official website of the São Paulo Bike Lanes Program, a mapathon to include São Paulo Bike Lanes in OpenStreetMap

Itaú Unibanco Bank

Business Intelligence Analyst

07/2012 - 08/2013

Database administration, automation of data capture, creation of reports, presentations, general refactoring of old codebases and occasional UNIX systems administration. Created automated ETL procedures which decreased some process' times from 3 hours to 10 minutes. Developed better compression procedures which decreased storage size in 50%. Created a local wiki for the department.

Model Validation Analyst

10/2011 - 07/2012

Validation of Credit Risk Models for the RAROC Project, part of the Basel II Project, in Itaú Unibanco Bank. Worked with LGD, EAD, CEA and other KPIs. Helped to validate 18 models for different financial products of the bank. Created a local Wiki.

Instituto de Tecnologia para o 3o Setor

Programmer and Systems Administrator

01/2011 - 09/2011

Development of software in Python and Javascript. Configuration and deployment of servers. Creation of automated testing. Our team made two web apps in seven months: MootiroForm, a Form Creator tailored for use in NGOs, and MootiroVote, a "Stack Overflow-like" website for NGOs. As a member of a small team, I participated in several parts of the project, such as development, systems administration, training of testers and keynotes to general public and interested developers.

FW Soluções Ambientais

Contractor

2009 - 2010

Configuration of Linux Servers as intranet servers, VPN server and backup solution. Also did network setup, computer assembly and general support of Windows PCs. Proofreading and mathematics revision in technical reports.

Ubilibet

Head of Technical Department

2007 - 2008

Configuration and deployment of Linux Servers using Apache, dovecot, Bind DNS and custom daemons. Creation and maintenance of custom daemons in Perl. Development of new intranet functionalities in PHP using PostgreSQL as a backend. Tech support of Windows PCs. One of my achievements has been the improvement of the spam filters, increasing by three times the amount of captured spam.

Keynotes and Awards

São Paulo Comptroller General's Office, 2016

Keynote on uses of Government Open Data, difficulties on using and ways to better publish Open Data

Mobilab (Laboratory of Urban Mobility of São Paulo City Hall), 2016

Workshop on what is OpenStreetMap, what are its uses and how to contribute to it

Bicicultura Festival, 2016

Panelist on Panel about Collaborative Bicycle Mapping and taught a workshop on OpenStreetMap

Python Data Science Meetup, São Paulo, 2016

Keynote about making crawlers to get the land records dataset

State of The Map LATAM 2015 at Santiago de Chile

One Keynote about the making of a bicycle routing app and other about mapping with Mapillary

Santander Scholarship, 2009

Undergraduate Merit Scholarship given by Santander Bank for studying in Spain.

Undergraduate Scholarship, 2006

Scholarship for Undergraduate Research Project on Value-at-Risk, A benchmark for risk in financial portfolios

Undergraduate Scholarship, 2005

Scholarship for Undergraduate Research Project on Graph Theory

Education

Campinas State University, Brazil

Major in Applied and Computational Mathematics 2009

Volunteer Work

OpenStreetMap

Active member of Brazil's charter. Helped organize 2016 LATAM Conference **2014-nowadays**

Bike Anjo

Instructor of routes and bike maintenance **2012-nowadays**

Tashi Gyatso Institute

Portuguese Classes for Foreign Monks **2009-2010**

UNICAMP Student Residence Free Cram School

Mathematics and Physics Teacher **2004-2005**

Languages

English - fluent
Japanese - intermediate

Spanish - fluent
Catalan - intermediate

Portuguese - fluent