## TIAGO FASSONI

PROGRAMMER, DATA SCIENTIST, ACTIVIST

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São Paulo, Brazil

### Selected Recent Projects

Collaborative discussion platform for Points of Interest: Thanks to a judicial decision, São Paulo City Hall has to place 3.000 bicycle stands all around the city as soon as possible. Together with a team, we won an grant to make a platform so people could take pictures of where they want a a bicycle stand, annotate that point, discuss it with other people and receive an adequate answer from the city hall. I made the entire platform and made it extensible for uses in other projects. One project that is using the platform is an effort to show usage of São Paulo bike lanes

Website with several Open Data Analysis: There is a lack of Open Data reporting 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 cited 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

### Freelance Developer and Data Scientist

10/2015 - nowadays

Projects involving data science, web and mobile programming for local and remote NGOs, such as Transparency International, Digital Democracy and São Paulo's Ciclocidade

### MobiLab

### Generalist Programmer

10/2015 - nowadays

MobiLab is a laboratory, inside São Paulo City Hall, of technology applied to urban mobility. Inside it, I made: The organization's website, a fully responsive and accessible website for public consultations of urban infrastructure, an website of the São Paulo bike lanes, a mapathon to put bike lanes on OpenStreetMap, and was Scrum Master of a bicycle routing app and a smartphone app for fining bad drivers

### Itaú Unibanco Bank

### Business Intelligence Analyst

07/2012 - 08/2013

Database administration, automation of data capture, creation of new reports, general refactoring of old codebase. Thanks to the automated procedures I created, the time in ETL decreased from 3 hours to 10 minutes. I also authored 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 Bank. I worked with LGD, EAD, CEA, validating 18 calculators and gave presentations to the VP of Risk of Itaú. Also created a local Wiki.

### Instituto de Tecnologia para o 30 Setor

### Programmer and Systems Administrator

01/2011 - 09/2012

Development of software in Python and Javascript. Configuration and deployment of servers. Creation of automated testing. Our team made two webapps 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 (Barcelona)

### 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, triplicating 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

Work

OpenStreetMap Brazil
Active member since 2014. This year, helped to organize the 2016 State of The Map LATAM
2014-1

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