# Eduardo Mucelli | Software Engineer

Paris - France

☐ +33 787 361 492 • ☑ edumucelli@gmail.com • ☑ www.eduar.do 



## **Education**

École Polytechnique

Computer Science, Ph.D.

Federal University of Minas Gerais

Computer Science, Master's degree

Pontifical Catholic University of Minas Gerais

Computer Science, Bachelor's degree

France

October 2011 — May 2015

Brazil

March 2009 — July 2011

**Brazil** August 2004 — August 2008

Ph.D thesis

Title: From Your Routine to Better Network Services %

Supervisor: Aline C. Viana ✓

Description: Investigated characteristics of human mobility and their impact on the network data traffic, planning and deployment. I've analyzed large-scale datasets from mobility and traffic demands generated by millions of users. Python's multiprocessing, thread and R multi-core libraries were used to summarize and assess massive amounts of data.

Results: Published 5 conference papers, 2 journal papers, and created a data traffic simulator.

# **Professional Experiences**

**BlaBlaCar** France

Software Engineer July 2016 - Present

Developing features, optimizing performance, deploying to production and monitoring a dozen of Java services at the Trip Search team. For example, meeting points service to provide drivers and passengers where to meet using Machine Learning recommendation. Routing service based on OSRM to fastly calculate routes at user search time to match drivers and passengers with the smallest possible detour. Mainly technologies are Java, XGBoost, R, Python, OSRM, PostgreSQL, PostGIS, MySQL, Elasticsearch, Redis.

Orange France June 2015 - June 2016 Postdoctoral Researcher

Developed machine-learning assisted techniques to predict users' QoE based on network's KPIs.

**Dito Internet** Brazil

Software Engineer July 2011 — September 2011

Developed in Ruby on Rails, as part of a team, Telecom Italia Mobile's project called TIM Beta, timbeta.com.br.

**Telecom Italia Future Centre** 

Intern November 2010 — May 2011

Developed, in Python, a project called Future of Enterprises aiming to improve the real-time interaction among employees.

Task Internet Brazil

Systems Analyst

Lead developer of a social network in Ruby on Rails.

February 2008 — February 2009

Italy

## Full-stack, Android and iOS side-project applications

Rosto.io - https://www.rosto.io

Python, Keras, Tensorflow, Ruby

Full-featured face recognition SaaS. It provides face detection features such as age, gender, emotion, ethnicity, landmark, glasses, smile, hair segmentation and much more. All based on end-to-end machine learning models written in Keras and Tensorflow. It runs on top of Flask, Rails, Nginx, Docker all monitored with Prometheus and Grafana.

Eazy.bike - http://eazy.bike, Android app, iOS app

Ruby, Python, Java (Android), Swift (iOS), Javascript

It finds the best bike-sharing cycling routes in more than 443 cities distributed in 45 countries. It uses real-time information of bike availability and proximity to predict the best stations to pick-up and drop-off. The Android and iOS apps provide automatic trajectory redirection whenever destination station fills up during user's ride. It can be accessed by city-specific domains for improved context information, e.g., paris.eazy.bike, or london.eazy.bike, etc.

## Proconfie - http://www.proconfie.com

Ruby, Python, R

It helps people to choose companies based on complains presented by other customers. Received Honorary Mention award from the Brazilian Ministry of Justice. Refer to the Awards section for further information.

## CEP Aberto - http://www.cepaberto.com

Ruby, Python, Javascript

Collaborative application that aims to publicly open the Brazilian Postal Code (CEP) data. Contains information of about 1 million CEPs. It provides an API for developers and, for the end-users, a collaborative platform to improve the quality of the data. About 30K registered users.

## Skills

Language: Java, Python, Ruby, R Framework: Springboot, Flask, Ruby on Rails

Machine learning: Keras, Tensorflow, Pytorch, Caret, XG- OS: Linux

Boost

VCS: Git DB: MySQL, PostgreSQL (PostGIS), Redis, Elasticsearch

# Recent publications %

- Lin, Yu-Ting and Oliveira, Mucelli Rezende Oliveira, Eduardo and Ben Jemaa, Sana and Eddine Elayoubi, Salah., "Machine Learning for Predicting QoE of Video Streaming in Mobile Networks", IEEE ICC Communication QoS, reliability and modeling symposium, May 2017.
- Oliveira, Eduardo Mucelli Rezende and Carneiro Viana, Aline and Naveen, K. P. and Sarraute, Carlos., "Mobile Data Traffic Modeling: Revealing Temporal Facets", Elsevier Computer Networks, November 2016.
- o Oliveira, Eduardo Mucelli Rezende and Carneiro Viana, Aline and Naveen, K. P. and Sarraute, Carlos and Brea, Jorge and Alvarez-Hamelin, Ignacio., "On the regularity of human mobility", Elsevier Pervasive and Mobile Computing, May 2016.

## Languages

Portuguese: Native speaker French: Fluent
English: Fluent Italian: Advanced

# Some Open Source Projects

#### Benchmark XGBoost Java - Code %

Comprehensive benchmark of XGBoost libraries for Java.

Twitter applet - Code %

Twitter applet for Cairo-Dock which handles most of Twitter's API features, including streaming.

WebSearch applet - Code %

Metasearch applet for Cairo-Dock capable of retrieving text and image results from several sources, e.g., Google, Bing, Yahoo!, Youtube, and Twitter.

Repeat One Song - Code %

The Repeat One Song feature for Rhythmbox.

## **Awards**

#### Honorary mention

Brazilian Ministry of Justice

May 2013

Open Data Applications Contest. Lead developer of a Ruby on Rails application called Proconfie. Refer to section Full-stack, Android and iOS applications for more details about this application.

#### Silver Medal

Pontifical Catholic University of Minas Gerais Second best overall score during the bachelor.

July 2008

#### Honorary mention

Pontifical Catholic University of Minas Gerais

May 2007

For the work "Game Theory for Decision Making in Wireless Sensor Networks" presented in the 15<sup>th</sup> Sciences Seminar.