

# Rafael Polo

*Software Engineer & Consultant with 20 years of experience on IT projects*



## Personal

First name: Rafael  
Middle name: Gomes de Oliveira  
Last name: Polo  
Age and birthday: 39 years old, 13 June 1985  
Marital Status: Single, no children  
Citizenship: Portuguese and Brazilian  
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## Formal Education

- **Postgraduate in Data Science for Finance** – 2021  
NOVA Information Management School, Lisbon
- **Master in Information Systems** – 2010~2012  
Research Area: Knowledge Representation and Reasoning, PPGI/UNIRIO
- **Bachelor in Computer Science** – 2003~2009 [[diploma](#)]  
Thesis: Agile Systems Development for Web 2.0 with Ruby on Rails

## Relevant Skills

- System Analysis & Modeling with UML
- MVC System Architecture, Design Patterns & Object-Oriented Programming
- Data Engineering, Data Science, Relational Databases & SQL
- Distributing and Scaling Processes with Message Queues
- Developing Web Crawlers & Bots for Data Mining & ETL
- Linux Systems, VPS, DevOps, SSH & Deploy with CI/CD processes
- Full Stack Developer & Front-end Web Design with HTML, CSS and Javascript frameworks
- **Multidisciplinary approach.** Projects with linguists, designers, journalists, economists, artists...

## Main Technologies

- Ruby on Rails (RoR), ActiveRecord, Kafka, Redis, Sidekiq, nokogiri, debug...
- Development Environment: Linux, Git, Zsh, Tmux, Screen, SpaceVim...
- Regular Expressions, RabbitMQ, Web Services, JSON, REST & APIs integration.
- Databases: MySQL, MongoDB, PostgreSQL, Clickhouse & GraphQL.
- Processing.org Media Framework, ffmpeg, imagemagik, convert...
- Javascript frameworks: D3js, jQuery, Vue.js + Data Visualization libs
- Projects developed in Ruby, PHP, Python, Java, Crystal, Typescript, Pascal and Bash.

## ExtraPolo! – own Agency

From 2008 to 2023 Polo has worked as an independent Software Developer and IT Consultant, developing dozens of Software Projects for public and private contractors in Brazil, Germany, Greece and Switzerland - also publishing different purpose SaaS, tools, bots, database mappings and visualizations.

## **Relevant Professional Experience**

- **Swisscom** – *actual* – Zürich, Switzerland  
**DevOps Engineer** developing platforms for Telecommunication Operations
- **EDGE Strategy** – 2023 – 1y – Zug, Switzerland  
**Senior Tech Lead** managing projects and hiring UX & Dev Teams for a SaaS Company
- **Code+Create School + Khora Community Center** – 2017~2018 – Athens, Greece  
**Web Development Teacher** – 30 diverse students on Linux, Javascript, HTML, CSS
- **Tactical Tech Collective** – 2014~2016 – Berlin, Germany  
**Senior Ruby on Rails Developer** for a NGO under the *Exposing the Invisible Team*.
- **Trommsdorf + Drüner** – 2013~2014 – Berlin, Germany  
**Full-stack Engineer** – Innovation Team developing Business Intelligence dashboards
- **Cortex Intelligence** – 2007~2008 – Rio de Janeiro, Brazil  
**Developer** in the Competitive Intelligence and Data Mining Team
- **MeuServidor** – Co-founder – 2002~2003 - Nova Friburgo, Brazil  
**Co-founder** of a Web Hosting Server Company in Brazil based on Linux & PHP

## **Selected self-initiated Projects**

- [Tribuna](#) – 2018 – This software corrects, integrates, structures and optimizes all Brazilian Electoral Supreme Court's Electoral Repository Data of candidates and votes into a single queryable relational database to facilitate further investigations & data-visualizations of public money flows on politicians.
- [Steganos](#) – 2014 – Ruby algorithm to encode & decode any digital file into an image, and vice versa.
- [Rastros](#) – 2012 – Written using the Processing.org Media Framework. *Traces*, in English, is an open-source software project that enables real-time detection and manipulation of movements in beautiful ways.
- [Mostre!me Cultura](#) – 2011 – Full-stack platform as an Experimental Culture & Communication system, exposing with many filters and data visualization all Brazilian Ministry of Culture data-mined financed nation-wide cultural projects of 10 years.
- [Consulta Natural](#) – 2009 – Ruby implementation of the 'Natural Language Query System for RDF Repositories' paper from Nokia Research Center Cambridge, 2007, applied to a Google Talk agent.
- [Chat-RSA](#) – 2008 – ChatRSA is a Privacy Software written in Java which provides automatic RSA encryption and decryption chat messages using basic TCP/IP connections.

## **Natural Languages**

- Native Brazilian Portuguese
- Advanced Spoken Spanish
- A2 level Greek – **3 years in Athens**
- A2 level German – **4 years in Berlin and Zürich**
- Fluent English – **12 years in between international groups**