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# **Experience**

CARTO · carto.com
Lead of Front End and Front End developer
November 2014 - June 2017

I was working in the proof of concept in the early stages, but when it turned into a company itself, I was in charge of the JavaScript and UI development from  $\underline{v1}$  ( $\underline{v2}$  and  $\underline{v2.1}$  in the path) to the last and recent one, <u>Builder</u>.

In the programming side, we started the pillar of the mentioned editor based in Backbone.js, using Browserify for our daily workflow, Jasmine for unit testing, and created the current main JS library called <u>CartoDB.js</u>. It is a Javascript library for developers, where they can build awesome websites and map visualisations with the CARTO platform.

I was in charge of the development of new features during the first two years, and after that period, my role changed into a Lead of Front End, leading a small team, but still helping in new features or starting with the next version of the application.

# Lead of Builder team

October 2015 - October 2017

In the last iteration of the main product, called <u>Builder</u>, I was leading its Front End and the Back End development. In the Front End, side we kept working with Backbone.js (with steroids) as main MVC framework, but we improved our workflow starting using Webpack. In the Back End part, we accomplished several refactors and all Front End requirements, following our current Ruby on Rails implementation.

Apart from that, I was involved in the development of a new JavaScript library called <u>Deep-Insights</u>, for enabling visualization, exploration, dynamic filtering and drill-down of data. Using CartoDB.js core library and D3.js for graphs.

# **Head of Technology**

October 2017 - January 2018

Last months in CARTO I became head of the technology area, improving daily workflows and communication between Technology and Product departments. It included managing monthly Product update meeting for the whole company.

Also, I developed an internal application made with Vue.js for improving our Response team rotation cycle. Three people were in charge of critical issues during the week, and every we used to replace people. I created that application in order to automate the teammates election based on appearances, holidays, on-call cycles, roles,...

Apart from that, I helped in the Front End transition after my departure to another role.

### Open source projects collaboration

- · CartoDB, (aka CARTO Builder), analyze and visualize geospatial data in the web. Available on <u>GitHub</u>, and I'm the most active contributor.
- · CartoDB.js, JavaScript library for building applications using CARTO platform, on GitHub too.
- · <u>Deep-Insights</u>, JavaScript library for enabling visualization, exploration, dynamic filtering and drill-down of data hosted in CARTO. Recently migrated to CARTO Builder.
- · <u>Torque</u>, JavaScript library for visualising temporal data over a map, also on <u>GitHub</u>.

**Vizzuality** · <u>vizzuality.com</u>
<u>UI developer</u>
February 2009 - November 2014

I started in the early days of the company, developing map applications for environmental purposes using Flash technologies. After that, I started working as UI developer creating web applications and map visualizations, using last Front End available technologies. Last two years I was working on CartoDB, the previous iteration to CARTO, transforming wireframes and interaction designs to fully working features and creating tools for live map edition.

### Major projects

<u>CartoDB</u>, analyze and visualize geospatial data in the web.
 UI interface in the main application and JS front development in the core library called CartoDB.js.

A project developed by Vizzuality.

· <u>Living cities</u>, visualizing traffic data in multiple cities.

Developing several HTML map elements and animations over the 3D map, using Leaflet.js. A project with Here.com.

- · <u>Evolution of the web</u>, interactive infographic about the evolution of browsers and the web. Create the visualization and manage all the SVG animations using JavaScript and CSS3. Developed for Google Chrome.
- OldWeather, citizen science project for digitising weather observations.
   Map development and UI interface of the entire site.
   A project with Zooniverse.
- · <u>Spanish 2011 elections</u>, using CartoDB to visualize the results of the spanish government election.

HTML and CSS implementation, creating the map visualization interaction from the beginning using Google Maps API.

Project done for Spanish television RTVE.

- <u>GeoCAT</u>, map tool to perform geospatial analysis.
   Creating the tool from the beginning based on Google Maps API using HTML5 technologies.
   A project for IUCN (International Union for Conservation of Nature).
- <u>ProtectedPlanet</u>, a project for expanding protected areas data.
   Front code implementation, map development under Google Maps Api.
   A collaboration with UNEP-WCMC (World Conservation Monitoring Centre).

# Open source projects collaboration

- $\cdot$  <u>Leaflet</u>, library for mobile-friendly interactive maps, you can download the code through Github.
- · Wax, client implementation of the UTFGrid interaction specification, available on Github.

#### **Conferences**

- · Talk in FOSS4G 2011 conference about "HTML5 for Rich Geospatial applications on the web", based on a project called GeoCAT developed at Vizzuality.
- · MadridJS 2012 talk about "What is <u>CartoDB</u> and how it works", presentation available on GitHub.

### **Education**

· Computer Science at Universidad Rey Juan Carlos (Móstoles, Spain) September 2004 - May 2009 (Unfinished)