+34 626 364 652
dsaiztc@gmail.com
Spain

# DANIEL SAIZ
English | Spanish

github.com/dsaiztc
linkedin.com/in/dsaiztc
dsaiztc.com

## Work Experience

**Software Engineer | CST International | Dublin, Ireland**                              **08.2015 - Now**

- Design and development of an *event-driven* data processing system in AWS with **python**: it collects different sources of data (**S3**, **API Gateway**), process and performs different actions based on the content. All is based on events and queues (**DynamoDB**, **DynamoDB Streams**) that are automatically processed by different **AWS Lambda** functions. This was the result of a migration/unification of many different client-based systems (different scripts, jobs and DBs).

- Data cleaning and analysis (EDA, Hypothesis testing, visualizations and some basic ML algorithm). Data retrieving & wrangling mainly with **python** (requests, BeautifulSoup, pandas). Data analysis with **R** (tidyr, dplyr, ggplot, lm). Some experience with NLTK and sklearn for comment classification.

- Full Stack development for enhance/renew a reporting system running on **Web2py**. Using **Bootstrap** 3 for building the interface, **jQuery** (with a few plugins) for DOM manipulation and AJAX requests as well as visualization libraries like **Google Visualization**, **D3.js** or **C3.js**. Use of **Reportlab** for building PDFs. Define *parameterized* **SQL** queries for MySQL.

- Setup of **AWS Elasticsearch Service** integrated (proxied) within the Web2py reporting system using Searchkit UI Components. Before going for this UI kit I built a prototype from scratch with **Vue.js**.

*Skillset:* python, py.test, SQL, git, Web2py, Statistics, Selenium, HTML, CSS, JavaScript, jQuery, Bootstrap, R, Unix, AWS (S3, Lambda, DynamoDB, API Gateway, VPC, RDS, CloudWatch, CloudFront), Microsoft Power BI

**Software Engineer (Intern) | UC3M | Madrid, Spain**                              **12.2013 – 06.2014**

- I led the design and development of a native **Android** app in **Java** for *Bultaco Motors* (electric motorcycle manufacturer) through an R&D project with *Carlos III University of Madrid*.

- Main development: GPS navigation app (based on *OsmAnd*) with real-time collection & display of telemetry data (Bluetooth). Full development of a Machine Learning system (ANN/MLP) in Java aiming to predict the viability of unknown routes based on historic data. Information retrieval from SOAP (IIS Server).

*Skillset:* Java, git, SQL, Machine Learning

## Education

**Telecommunications Engineering (BSc + MSc) | UC3M | Madrid, Spain**                 **09.2008 – 09.2014**

Top 15%. Main Coursework: Computer Science, Digital Signal Processing, Electronics, Communication Systems, Networking, Statistics. Final Year Project Distinction with Honors: *Range Estimation System for Electric Vehicles with Artificial Neural Networks*, available here (in Spanish): http://dsaiztc.com/PFC.pdf

## Other Technical Experience

**Data Analyst Nanodegree (unfinished) | Udacity | Online**                              **03.2015 – 08.2015**

Built by industry and project-based curriculum for becoming a Data Analysis / Scientist.

- Exploratory Data Analysis with R. Explore new datasets to uncover meaningful patterns.

- Data Wrangling OpenStreetMaps Data. Use data munging techniques to clean OpenStreetMap data, converting it from XML to JSON format, importing the clean file into a MongoDB database and run some queries (python).

- Analyzing the NYC Subway Dataset. Looking for data trends with different analysis: statistical (regression analysis, hypothesis testing), raw data and visualizations. CSV data analyzed with different python data-analysis tools (pandas, stats, matplotlib, ggplot).

**Secret Santa (Android APP)**                              **11.2014 – 12.2014**

Native Android application for making *Secret Santa* draws (http://dsaiztc.com/secretsanta). >15000 downloads.