

## SKILLS

- Python • R
- Regular Expressions
- Scraping • SQL
- Matlab
- HTML • CSS
- XPath • Unit Testing

### PYTHON

- Scikit-learn • Pandas
- Numpy • statsmodels
- Matplotlib • Seaborn
- Scrapy • BeautifulSoup
- Quantopian • Backtrader
- Jupyter-Notebook
- Tensorflow

### DATA SCIENCE

- Statistical analysis
- Time Series
- Deep learning

### OTHER

- Amazon Web Services (AWS) EC2
- Quantopian
- Linux • GitHub
- $\LaTeX$  • markdown

## LANGUAGES

Spanish	native
English	full-proficiency Cambridge Certificate in Advanced English - CAE (C1) (2012)
French	intermediate

## EDUCATION

### MSc in Photonics *2013-2014*

 Polytechnic University of Catalonia (UPC)  
Institute of Photonic Sciences (ICFO), UAB, UB

### Telecommunication Engineering (BSc + MSc) *2005-2012*

 University of Malaga

### COURSES

#### Data Analyst Nanodegree , *November 2016 - June 2017*

 Udacity  

#### Machine Learning Engineer Nanodegree , *July 2016 - November 2016*


 Udacity 

#### Machine Learning Course 2016 Stanford University, Coursera

Certificate: [source](#)

## EXPERIENCE

### Data Scientist & Python Developer *April 2017 - present*

- **Scrapinghub** *April 2019 - present | Remote, full-time*
  - Development of scraping software based on Scrapy. HTML, CSS selectors, XPath, XHR. Unit testing, production code, CI, cloud deployment.
- **LISTedTECH** *January 2019 - April 2019 | Remote*
  - Development of a tool for retrieving information about universities. Data cleaning for database update. Scrapy. Regular expressions.
- **Windsor AI** *November 2018 - January 2019 | Remote*
  - TV attributions and ROI report generation using R and PostgreSQL.
- **Arbuckle Capital** *September 2017 - January 2019 | Remote*
  - Algorithmic trading system in (Quantopian, Backtrader (Python)). Prediction of bull-bear periods and cluster volatility periods. Used GARCH models to predict volatility. Portfolio selection.
- **SerpicoDEV** *June 2017 - September 2017 | Remote*
  - Implemented a prediction system in Python to determine prices changes in commodities from markets in the U.S.
- **Mentor and Reviewer**  Udacity
  - **Classroom Mentor** *April 2017 - present | Remote, part-time*
    - \* Provided on-demand support to the **Machine Learning Nanodegree (MLND)** and the **Data Analyst Nanodegree (DAND)** students.
    - \* 120 people under mentoring with **average rating of 4.7**
  - **Project Reviewer** *April 2017 - present | Remote, part-time*
    - \* Helped students of the **Deep Learning Nanodegree Foundation** and the **Artificial Intelligence Nanodegree** in projects related to Neural Networks, Reinforcement Learning and Statistical Analysis.
    - \* 750+ projects reviewed with **average rating of 4.93**

### Predoctoral researcher *October 2015 - October 2016 | Barcelona*

Optical Communications Group (GCO)

 Polytechnic University of Catalonia (UPC)

- Developed Python and Matlab scripts for the simulation of optical devices
- Simulated wavelength shifter for optical networks units with 54dB side band rejection
- Designed new devices for highly efficient networks

## PROJECTS - SOURCE

- **Contributions** [source](#)
  - **Scikit-Learn**  
Fixed bugs and implemented new features.
  - **Pandas**  
Documented `pandas.DataFrame.boxplot` function.
  - **StackOverflow** - [profile](#)  
Answered questions related to python, pandas, sklearn, matplotlib, numpy, ggplot
- **Stocks Dashboard in Bokeh** - [source](#) *May 2018*
  - Display time series automatically using Bokeh (Python).
  - Easy plot arrangement and format through a dictionary of parameters.
- **Right Whale call recognition using Convolutional Neural Networks** - [source](#) *November 2016*
  - Training of Convolutional Neural Networks (ConvNets) models widely used for character recognition (LeNet5) for audio recognition. Detected up-calls with 0.95 Area Under the Curve (AUC).
  - Tensorflow, scikit-learn, python, pandas, numpy, csv, matplotlib