

SKILLS

- Python • R
- Regular Expressions
- Scrapping • SQL
- Matlab

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	basic

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   mongoDB

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

 Udacity 

Machine learning Course 2016 Stanford University, Coursera

Certificate: [source](#)

EXPERIENCE

Independent Contractor: Data Scientist & Python Developer *June 2017 - present*

- **LISTedTECH** *January 2019 - present | Remote*
 - Development of a tool for scrapping information about universities. Data cleaning for database update. Scrapy. Regular expressions.
- **Windsor AI** *November 2018 - present | Remote*
 - TV attritbutions and ROI report generation using R and PostgresSQL.
- **Arbuckle Capital** *September 2017 - present | Remote*
 - Algorithmic trading system in (Quantopian, Backtrader (Python)). Prediction of bull-bear periods and cluster periods of volatility. Used GARCH models to predict volatility. Portfolio selection.
- **SerpicoDEV** *June 2017 - September 2017 | Remote*
 - Implemented a predictor system im Python to determine prices changes in commodities from markets of 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 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 plots arrangement and format through 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