

SKILLS

DATA SCIENCE

- Statistical analysis
- Supervised learning
- Unsupervised learning
- Reinforcement learning
- Deep learning
- Time Series
- t-test • ANOVA
- chi-squared test
- A/B test

PROGRAMMING LANGUAGES

- Python • R
- D3.js • Matlab
- SQL • C++

OTHER

- Scikit-learn • Pandas • Numpy
- Matplotlib • Seaborn • ggplot
- IPython • Jupyter-Notebook
- Tensorflow
- Amazon Web Services (AWS) EC2
- Quantopian
- Linux • Ubuntu • GitHub
- \LaTeX • markdown • Rmarkdown

LANGUAGES

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

EDUCATION

Data Analyst Nanodegree , November 2016 - June 2017

 Udacity   mongoDB

Machine Learning Engineer Nanodegree , July 2016 - November 2016

 Udacity  Google

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

Machine learning Course 2016  Stanford University,  Coursera

Certificate: [source](#)

EXPERIENCE

Data Science Consultant September 2017 - present

- Data Analysis and Machine Learning tasks via Upwork and other platforms. Also Software development of Python tools.
- Implemented a trading system in Python and added Machine Learning techniques to distinguish bull-bear periods and cluster periods of volatility.

Machine Learning Engineer July 2017 - October 2017 | Remote

SerpicoDEV

- Data Science and Python development tasks: data wrangling and analysis, model selection and implementation.
- Implemented a predictor system in Python to determine prices changes in commodities from markets of the U.S.

Classroom Mentor April 2017 - present | Remote, part-time

 Udacity

- 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 January 2017 - present | Remote, part-time

 Udacity

- Helped students of the **Deep Learning Nanodegree Foundation** and the **Artificial Intelligence Nanodegree** in projects related to Neural Networks, Reinforcement Learning and Statistical Analysis.
- 650+ 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](#)

- **Contributor to Scikit-Learn-** [source](#) December 2017 - present
 - Fixed bugs and implemented new features in the existing project of Scikit-Learn, a module for Machine Learning in Python.
 - For details see my GitHub Profile

- **Test a Perceptual Phenomenon -** [source](#) *December 2016*
 - Performed statistical test to analyze the Stroop effect, a classic result of experimental psychology.
 - t-test, ggplot, R, rmarkdown
- **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