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Isabel María Villalba Jiménez

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Github: **mabelvj**
StackOverflow: **mabel-villalba**
Udacity: **isabelmaravillalbajimnez**

SKILLS

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

PYTHON

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

R

- Seaborn • ggplot

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

Data Analyst Nanodegree , *November 2016 - June 2017*
Udacity facebook 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 Scientist & Python Developer *September 2017 - present*

- Data Analysis and Machine Learning projects. Also Software development of Python tools.
- Implemented an algorithmic trading system in Python and added Machine Learning techniques to distinguish bull-bear periods and cluster periods of volatility. Used GARCH models to predict volatility. Portfolio selection.
- Web scrapping, information processing and matching. Regular expressions. Reports generation

Machine Learning Engineer *July 2017 - October 2017 | Remote*
SerpicoDEV

- Data Science and Python development: data wrangling and analysis, model selection and implementation.
- Implemented a predictor system im 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.
- 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 arrangment 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