Isabel María Villalba Jiménez

mabelvj@gmail.com

Skype: mabelyj Github: mabelyj Udacity: isabelmaravillalbajimnez

SKILLS

DATA SCIENCE

- Statistical analysis
- Supervised learning
- Unsupervised learning
- Reinforcement learning
- Deep learning

PROGRAMMING LANGUAGES

- Python Matlab
- MTFX C++ CSS

OTHER

- Scikit-learn Pandas Numpy
- Matplotlib Ipython-notebook
- Linux Ubuntu GitHub
- Tensorflow
- Amazon Web Services (AWS)

LANGUAGES

Spanish native

English full-proficiency

Cambridge Certificate in Advanced English -

CAE (C1) (2012)

French basic

EDUCATION

DATA ANALYST NANODEGREE

MACHINE LEARNING ENGINEER NANODEGREE

UDACITY GOOGLE, July 2016 - November 2016

MSC IN PHOTONICS

POLYTECHNIC UNIVERSITY OF CATALONIA (UPC) 2013-2014 Institute of Photonic Sciences (ICFO), UAB, UB

TELECOMMUNICATION ENGINEERING (BSC + MSC)

UNIVERSITY OF MALAGA 2005-2012

COURSES

MACHINE LEARNING COURSE

ANDREW NG

§ STANFORD UNIVERSITY ☐ COURSERA 2016

Certificate:

https://www.coursera.org/account/accomplishments/certificate/BDUV2MJT2P7T

PROJECTS

UDACITY GOOGLE | Machine Learning Nanodegree

- Right Whale call recognition using Convolutional Neural Networks source September 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
- Building a Student Intervention System source July 2016
 - Analysis of high school students dataset to plan interventions
 - Optimized supervised learning algorithms. Tuned logistic regression model using 'grid_search' and 'make_scorer'
 - Logistic regression, Support Vector Machines, Decision trees, scikit-learn, python, pandas, numpy, csv
- Creating Customer Segments source August 2016
 - Analysis of customers annual spending on diverse product categories
 - Implemented feature scaling and detected outliers. Applied principal component analysis (PCA) and dimensionality reduction
 - k-means, scikit-learn, python, pandas, numpy, csv, matplotlib

EXPERIENCE

PREDOCTORAL RESEARCHER

OPTICAL COMMUNICATIONS GROUP (GCO)

- POLYTECHNIC UNIVERSITY OF CATALONIA (UPC) October 2015 present | Barcelona
 - Developed Python and Matlab scripts for simulation of optical devices
 - Simulated wavelength shifter for optical networks units with a rejection on 54dB of the side band
 - Researched in optical communications systems
 - Designed new devices for highly efficient networks