Isabel María Villalba Jiménez

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Udacity: **isabelmaravillalbajimenez**

SKILLS

DATA SCIENCE

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

PROGRAMMING LANGUAGES

- Python • Matlab
- R • SQL • C++

OTHER

- Scikit-learn • Pandas • Numpy
- Matplotlib • Seaborn • ggplot
- Tensorflow • Ipython-notebook
- Amazon Web Services (AWS) EC2
- 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
Udacity facebook. mongoDB , November 2016 - in progress

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 facebook. mongoDB | Data Analyst Nanodegree

- **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

UDACITY GOOGLE | Machine Learning Nanodegree

- **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
- **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, matplotlib, csv

EXPERIENCE

UDACITY PROJECT REVIEWER
Udacity January 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.
- Python, numpy, pandas, scikit-learn, csv, matplotlib, jupyter-notebook

PREDOCTORAL RESEARCHER
Optical Communications Group (GCO)
Polytechnic University of Catalonia (UPC) October 2015 - October 2016 | Barcelona

- 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