

## EXPERIENCE

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### • UNDP (ONU)

*Data Science Consultant*

Caracas, VE

August 2019 - Present

- Designed and develop workflows for topic modeling and community detection to analyze hundred-thousand-scale text and network data.
- Sped up the analytical workflow by 75% by redesigning the sampling strategy for jobs.
- Generated CLI tool for automation of predefined analysis workflows.

**Technologies:** Python, R, Bash, Gephi and Power BI.

**Theory:** Topic modeling, Community detection, Network Analysis and NLP.

### • Universidad Central de Venezuela

*Advanced topics in AI(Adjunct Professor)*

Caracas, VE

October 2018 - Present

- Designed and organized course material and resources for topics described in here.
- Lectured material for students and grade their assignments.

*Introduction to Data Science (Teaching assistant)*  
*Data Mining (Teaching assistant)*

April 2015 - February 2018  
August 2015 - February 2018

- Designed and organized **practical** course material and resources for topics described in here.
- Lectured **practical** material for students and grade their assignments.

**Technologies:** Python, Latex, R, Weka, Colab, Jupyter and swirl.

**Theory:** Artificial intelligence, Data science and Data mining.

### • Oliver Wyman/Bairesdev

*Data engineer*

(remote) Caracas, VE

July 2020 - November 2020

- Helped to create a container image for provisioning Airflow instance.
- Created dynamic DAGs (Airflow) for (30+) stored procedures (SQL Server) by automatically parsing them from scripts.
- Created dynamic DAGs for importing tabular data (1M+ records) to SQL Server.
- Created dynamic DAGs for importing google analytics.

**Technologies:** Python, Airflow, SQL Server, Jenkins, Rancher, Docker, Kubernetes.

**Theory:** Data pipelines orchestration, ETL, Provisioning.

### • Quash.ai

*Machine learning engineer*

(remote) Caracas, VE

February 2019 - March 2020

- Developed a customer facing API for using our internal credit scoring model.
- Improved credit scoring model performance of 5 business clients by 15% by incorporating state-of-the-art ML models adapted for our feature sets and hyper-parameter optimization models.

**Technologies:** Python, R, S3 and Docker.

**Theory:** Credit scoring and Hyper-parameter optimization.

### • Advoqt

*Machine learning engineer*

(remote) Caracas, VE

February 2019 - August 2019

- Implemented Deep learning model for classifying malicious urls using only urls' text features, achieving 90% of baseline accuracy by adapting state-of-the-art models on urls classifications.

**Technologies:** Python, Elasticsearch and Spark.

**Theory:** Deep learning and Text classification.

- **Fetcher**

*Data Scientist*

Caracas, VE

*June 2018 - February 2019*

- Estimated demand of required candidates for sourcing using daily output data.
- Generated automated allocation algorithm for reducing overload of sourcing teams by 10% by using linear programming and constraint satisfaction techniques.

**Technologies:** R, Shiny, Latex, SQL and Metabase.

**Theory:** Linear programming and Constraint Satisfaction problems.

- **Predictvia**

*Artificial Intelligence*

*Artificial Intelligence intern*

Caracas, VE

*July 2016 - January 2017*

*February 2016 - July 2016*

- Performed social network analysis, exploratory data analysis, supervised and unsupervised learning.
- Built and implemented classification models, perform feature engineering and calibrated existing models.

**Technologies:** Python.

**Theory:** Social network analysis, Attribution models and Recommendation systems.

## OTHER PROGRAMMING TOOLS

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- **Cloud services:** AWS(Lambda, S3, Sagemaker), Azure(Blob storage).
- **Deep learning frameworks:** Keras, Tensorflow.
- **R:** dplyr, ggplot, tidyr, shiny, plumber...
- **Python:** xgboost, sci-kit, pandas, falcon, flask...
- **DevOps:** Jenkins, Terraform.
- **\*Learning:** Vue, Nodejs.

## EDUCATION

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- **Universidad Central de Venezuela**

*B.Sc in Computer Science*

Caracas, Venezuela

*Sept. 2012 – Jun. 2018*

- Took elective courses on: Introduction to data science, Advanced topics in data science, Artificial Intelligence, Data mining, Text mining, NoSQL databases, Digital image processing.
- (Thesis title) AdaBnn: Binarized Neural Networks trained with adaptive structural learning.

🔗 *Following sections items are clickable for references.*

## CERTIFICATIONS

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- **Coursera**

*Convolutional Neural Networks*

*Structuring Machine Learning Projects*

*Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization*

*Neural Networks and Deep Learning*

*R Programming*

*Text Mining and Analytics*

*Text retrieval and search engines*

*The Data Scientist's Toolbox*

*Data Visualization*

MOOC

*Issued September 2020*

*Issued May 2020*

*Issued May 2020*

*Issued May 2020*

*Issued September 2016*

*Issued August 2016*

*Issued June 2016*

*Issued June 2016*

*Issued March 2016*

## PERSONAL PROJECTS

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- AdaBnn: Binarized Neural Networks trained with adaptive structural learning.
- WarmChat: This app is a small chat room that classify every message and say weather is an insult or not using four classifiers: svm, random forest, decision trees and max entropy.
- Small tool for generating frequent words analysis on the position names of LinkedIn Connections.
- Template for Dockerized Shiny (R) application deployment.
- Latex template for CVs with dark theme, with CV guidelines from google.

## PERSONAL PUBLICATIONS

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- Sajidxa Mariño, Jesus Lares, Wilmer Gonzalez. Diode's Laser in Office Endoscopic Surgery Center for Nasal Obstruction and Snoring. J Med - Clin Res & Rev. 2018; 2(6): 1-3.
- Twitter, A data source for the academy (spanish).
- GitHub & Social Coding. Social network for programmers (spanish).
- Reproducible Research. Case of study: allocation of university places in UCV by OPSU (spanish).