Wilmer A. Gonzalez S. %

Machine learning engineer Caracas, Venezuela. Latest **2** / Light **?**



Experience

Serhant (through blocknerds.io)

Senior Machine learning engineer Lead

(remote) Caracas, VE May 2024 - Present

- Design and implement +5 Real state LLM use cases, reducing advisors' waiting time by at least 20%
- Increase team productivity by establishing MLOps practices like Prompt versioning
- o Develop Agents with tooling access to satisfy Real estate use cases

Technologies: Azure, Python, PromptLayer, LLMs, OpenAl ChatGPT, Claude, Langchain.

• The Hackett Group (through Develative)

AI Solutions Architect

(remote) Caracas, VE Nov 2024 - Feb 2025

- o Design architecture for LLM solutions related to BPMN
- Extend platform to include new LLM components

Technologies: Azure, Python, Django, LLMs, OpenAl, Langchain.

Brightflow.Al

(remote) Caracas, VE May 2023 - Present

Machine learning engineer

o Increase customer success team productivity by 10% by enabling model performance visibility on forecasting.

- o Increase team productivity by 20% by establishing MLOps practices like model versioning and registry workflows.
- o Develop a full-stack LLM component using financial data to generate insights for 100+ brands, increasing user engagement by 15%.

Technologies: AWS, Python, Typescript, React, MLflow, LLMs, OpenAl ChatGPT, Athena.

CircleUp (Acquired by Brightflow.AI)

(remote) Caracas, VE

Machine learning engineer

August 2021 - May 2023

- Establish MLOps practices across 100% of ML use-cases of the company, reducing development time by 12%.
- o Enable semantic comparison of 1.7M brands and a hundred thousand text attributes.
- o Improve and maintain ML pipelines of millions of observations with tens of GB-scale text data.

Technologies: AWS, GCP, Python, PySpark, Airflow, Vertex, BigQuery, Dataproc, Tensorflow, BERT.

Sigma

(remote) Caracas, VE June - September, 2023

Senior Machine learning engineer

- o Develop a misleading claims detection system for an advertising platform by using LLMs and prompt engineering.
- Integrate third-party ML services for feature detection and moderation on advertising creatives (image and text-based).

Technologies: Large Language Models (LLM), Prompt Engineering, Vertex AI, Google Cloud Platform (GCP), Python, Natural Language Processing (NLP).

UNDP (UN) Caracas, VE

Machine learning engineer

August 2019 - August 2021

- o Provide summaries from opinions and trends by processing 1.1M tweets with Topic Modeling and transformer-based models, reducing analysis time by 25%.
- o Reduce network analysis time by 83% by automating community and hub detection on hundreds of thousands of social media users' data.
- Sped up the analytical workflow by 75% by redesigning the sampling strategy of pipelines.

Technologies: Azure, Python, R. Bash, Gephi, Power BI, REST API, Vue, Airflow, Kubernetes, Tensorflow, BERT, NLP, Data engineering, Data visualization, Workflow orchestration, Social networks analytics.

(remote) Caracas, VE Quash March - July, 2021

Machine learning engineer (advisor)

- o Technical guide of the Data Science team.
- Decrease feature engineering time by 10% by creating 10+ data pipelines.
- Deploy personalized ML models for credit scoring, processing 10k+ applications across 5+ countries.

Machine learning engineer

February 2019 - March 2020

- Developed a customer-facing API for using our internal credit scoring model.
- o Increased approval rate by 15% of customers while keeping the same risk by optimizing state-of-the-art ML models.

Technologies: Python, R, AWS, Sagemaker, S3, REST APIs, Docker.

Universidad Central de Venezuela

Caracas, VE

Adjunct professor (Advanced topics in AI and data mining)

October 2018 - July 2024 (seasonal)

- o Designed and organized course material and resources for topics described in here.
- Lecture material for tens of students and graded their assignments.
- o Tutored thesis work on AI related to computer vision (Awarded with country-wise recognition for thesis work between 6 final candidates).

Teaching assistant (Introduction to Data Science, Data Mining)

April 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.

 Omdena (remote) Caracas, VE Jan - Apr, 2021

Lead machine learning engineer

- Helped create a trust score for news articles by implementing a claim detection model.
- o Improved usability of the product by creating a chrome extension connected to resultant models (blog post).
- o Contributed to open-source projects (claimbuster-spotter) related to NLP and Deep Learning models.

Technologies: Python, Keras, Tensorflow, Falcon, REST APIs, Javascript.

Oliver Wyman

Data engineer

(remote) Caracas, VE July - November, 2020

- o Enabled data pipelines processing by provisioning and configuring Airflow.
- Created DAGs for 30+ stored procedures from SQL Server scripts.
- Created DAGs for importing tabular data (1M+ records) to SQL Server.

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

Advoqt

(remote) Caracas, VE

February - August, 2019

Machine learning engineer

 \circ Enable malicious URL classification by developing a deep Learning model with $\approx 90\%$ accuracy.

Technologies: Python, Tensorflow, Elasticsearch and Spark.

• Fetcher

Data scientist

Caracas, VE

June 2018 - February 2019

• Decreased overload of sourcing teams by 10% by creating an automated allocation algorithm using Linear programming and Constraint Satisfaction techniques.

o Deployed load estimation models for tens of candidate sourcing projects for all recruiting teams.

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

Predictvia

Caracas, VE

Machine learning engineer

February 2016 - January 2017

- Performed social network analysis on millions of social media users and posts to detect hubs, and performed supervised and unsupervised learning.
- o Built and implemented classification models, perform feature engineering, and calibrated existing models.

Technologies: Python, bash.

TECHNICAL SKILLS

- Programming languages: Python, R, Bash, Julia.
- Cloud services: AWS (Lambda, S3, Sagemaker), GCP (Al Platform), Azure (Blob storage).
- Deep learning frameworks: Keras, Tensorflow.
- Others: xgboost, scikit, pandas, falcon, flask, fastapi, Docker, Kubernetes, Jenkins, Terraform
- Currently learning: Transformers models, Vue, Nodejs.

EDUCATION

• Universidad Central de Venezuela

Caracas, Venezuela

Sept. 2012 - Jun. 2018

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

CERTIFICATIONS (WITH LINKS)

• @ Udacity/Coursera MOOC

Machine Learning Engineering for Production (MLOps) Specialization Issued July 2022

Machine learning engineer nanodegreeIssued March 2021Deep learning specializationIssued January 2021

Sequence models Issued January 2021

Convolutional neural networks Issued September 2020

Structuring machine learning projects

Issued May 2020

Improving deep neural networks: Hyperparameter tuning, regularization and optimization

Issued May 2020

Neural networks and deep learning Issued May 2020

R Programming Issued September 2016

Text mining and analytics

Issued August 2016
Text retrieval and search engines

Issued June 2016
The data scientist's toolbox

Issued June 2016

Data visualization Issued March 2016

Personal Projects (with links)

- Philia: A Slack bot for empathy assessment in co-workers communications.
- AdaBnn: Binarized Neural Networks trained with adaptive structural learning.
- WarmChat: Chat room web app that classifies insults messages by using several classifiers.
- 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 (with links)

- Mahfuzur Rahman, Ann Chia, Wilmer Gonzalez. Fighting Misinformation and Fake News using NLP . 09/2021
- 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).