Yesid Leonardo López Sierra

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I am a Machine Learning Engineer with experience building web applications and creating needs-based testing strategies. I enjoy working in companies that allow me to grow, learn, innovate and do research. I enjoy teaching others and learning new things. Additionally, I have experience in MLOps deploying models to production, scaling them, testing them, and using cutting-edge devices for inference when it is needed.

WORK EXPERIENCE

35Up - Cross-selling — April 2023 - Present

Machine Learning Engineer

- Propose and implement a next level ML automation tool using Kubeflow
- Build recommendation systems using LLMs and a VectorDB
- Fine-tune GPT3 models from OpenAI to label data
- Research and design LLMs using BERT based architectures
- Deploy ML models to AWS using terraform as IaaC tool
- Support interview processes
- Tools: Python, Pytorch, scikit-learn, Kubeflow, Kubernetes, OpenAI, terraform, AWS, Kubernetes

Getsafe – Insurance Company — April 2022 - March 2023

Machine Learning Engineer — July 2022 - March 2023

- Implement Shadow and AB deployment to test ML models.
- Improve monitoring for the ML models using MLflow
- Extract and load data from Kafka to Snowflake
- Support the data science team to create more mature processes in their daily job
- Tools: Databricks, MLflow, AWS, cloud formation, snowflake, python.

Backend Engineer — April 2022 - June 2022

- Implement features taking in mind a quality mindset using Ruby
- Refactor components to deploy them quickly to new markets
- Visualize insurance data to generate alerts when there are inconsistencies
- Lead automation testing strategy to improve the quality in the product
- Tools: Ruby, JavaScript, Periscope, CircleCI, SQL, React

Perficient – Outsourcing Company — January 2019 - April 2022

Safe Fleet – Machine Learning Engineer — June 2021 – April 2022

- Create a backend application to preprocessing frames in videos
- Design a distributed architecture to be able to scale ML models in cutting edge devices
- Develop a Geo localization tool to highlight routes in a map. Important to create data for other teams.
- Deploy applications and models in Jetson devices
- Build object tracking models to detect if a car is moving using state-of-the-art models
- Maintain computer vision model to detect curbs in streets
- Tools: Python, TF, OpenCV, Redis, Docker, Jetson Nano, AWS, Javascript, React

Maritz – Data Engineer — May 2021 – June 2021

- Create synthetic data to train Google Auto ML models (NLP and Vision models).
- Evaluate NLP and Vision models.
- Create a Spring Bash application to generate PDF and images to train models.
- Improve the accuracy of the models based on tests for the models.
- Tools: Java, AutoML, Google Cloud, NLP, Spring Bash

Internal Project: Predictive Test Selection – Data Science applied in Testing — December 2020 – March 2021

- Create a model to select and prioritize tests that are more likely to fail
- Investigate and create supervised models like decision trees, neuronal networks and SVMs
- Create a plan for the investigation to get results fast
- Tools: Jenkins, Python, Javascript

Splunk – QA Automation Lead — January 2019 – May 2021

- E2E UI and API tests
- Integrate BDD through different automation levels using Cucumber
- Create automation strategy for several projects and do functional testing and test cases creation using TestRail
- Provide training to offshore members

- Tools: Javascript, Typescript, Node, Cucumber

EDUCATION

Universidad Icesi

Bachelor of Software Engineering — *GPA 4.3/5.0*

Master's degree in data science — *GPA 4.5/5.0*

CERTIFICATIONS

Coursera

DeepLearning.AI TensorFlow Developer	December 2021
Natural Language Processing in TensorFlow	December 2021
Sequences, Time Series and Prediction	December 2021
Convolutional Neural Networks in TensorFlow	October 2021
Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning	September 2021

PUBLICATIONS

Artificial Intelligence model to predict the virality of press articles July 2020 – June 2021

*NLP **paper** in which we studied the virality of two headlines to predict which one will be more viral*

- Using different deep learning architectures to find the one that could be more efficient
- Implement LSTM and BERT models as one of the proposals
- Use the transformer encoder as part of the best architecture to find the relation between the headline's words
- Tools: Python, TensorFlow, NLP, LSTM, BERT Transformers.

SKILLS

Programming Languages		Technologies
3 years:	Java, Javascript, Python, R	Pandas, Numpy, *Sklearn*, TenforFlow, Keras, NodeJS, TestCafe, Selenium, Git, AWS, Python, Docker
1 years:	C#, Groovy	OpenCV, TensorBoard, CSS, JQuery, React, Next, SQL, Unix/Bash, Junit, SCA, Google Cloud
1 Semester:	PHP, C++	AutoML GCP, Databricks, Comet, Spark, Tableau, PowerBI, Nestjs, Kubernetes, OpenAI, VectorDBs

MAJOR PROJECTS

Machine Learning models to predict and cluster students drop out January 2018 – December 2018

Data centric application that predicts if a software engineer freshman will drop out the bachelor's study, also a no supervised learning was developed to cluster the students that dropped out. Watch the video.

- Cluster students using the k-means clustering
- Predict retention of students using classification: KNN, neuronal network, SVM, decision trees and logistic regression
- Create an ETL to join data, preprocessing it and save it into a Postgres database
- Build the web application using Django
- Tools: Django, Python, JavaScript, Heroku, KNN, SVM, ANN, Postgres.

AWARDS

- Cum Laude GPA
- Best grade project for Software Engineering at Icesi
- Scholarship for the best 0,01 results in Colombia and Scholarship for a master's degree