## **INDUSTRIAL ENGINEER**

Industrial Engineer graduate from one of the best private universities of Venezuela with experience working with international clients and teams, development of software using various languages & technologies, back-end development, process analysis, statistical analysis, and development of ML models and NN models. With the **following** knowledge:

· Python3 · C++ · C# · Pytest/Unittest · Django · JavaScript · TypeScript · ReactJS/NextJS · NestJs · Prisma · Ruby/Rails · Keras & Tensorflow/Theano · Jupyter, Pandas, Numpy & Matplotlib · GCP · SPC (statistical process control)

#### **EDUCATION**

Rafael Belloso Chacin University (URBE) · Maracaibo, Venezuela (2014) **Industrial Engineer** 

## **RELEVANT EXPERIENCE**

## **TECH AND SOLVE** · Remote (Sep. 2022 – Feb. 2023)

Digital transformation through software development projects and DevOps with agile as a methodological framework.

Tech Lead Developer: Led the development of a Python program that interacts with the Google Cloud Platform (GCP) API to extract and generate a file with the desired information for a start up company in Austin, TX. The program allowed the client to have access to over 50.000 records of valuable data.

- Development and maintenance of a Python program which allowed the client to easily extract the information they were interested in.
- Make use of the Google APIs libraries to interact with the platform and retrieve the data.
- Manipulation of the data using Pandas, Numpy and Jupyter to obtain the desired output, clean the data, visualize the data and generate a file that the client can use.
- Use of Pytest and Unittest libraries to build mock tests, ensuring the quality of the code delivered.
- Use of native logging libraries to easily spot errors within the application and generate a log file.

## **FREELANCE** · Remote (Apr. 2016 – Present)

Self-Employed Software Developer: Developed a variety of programs to automate repetitive tasks for my clients, predict possible outcomes, organize messy information and clean data. Have worked in projects that involve the use of statistics, reading and editing Excel tables, web scraping, data analysis, Machine Learning models and Neural Network models, NLP, and web development and design.

- (2018 2019) Klickwell Worked with two clients to develop a horse betting program using Python that successfully reduce horse races to four horses, with a good accuracy rate for predicting the winning horse. The program allowed to automate and reduce the calculation time by around 60%. A Neural Network model was trained using Tensorflow based on the data collected in the process, which improved the evaluation score by around 30% against the old method.
- (2020 2021) CRUD Website using RubyOnRails/Bootstrap/PostgreSQL Developed a CRUD website following the Anki flashcard method using Ruby for the back-end, Bootstrap for the front-end and Postgresql as database, to manage flashcards taken when studying.
- (2021) E-commerce Website for client Built an E-commerce website using Django and Braintree as payment gateway where a customer can buy the products listed and generate the order for the shipment.

(2022) – E-commerce Website using NextJs/Tailwind/Typescript/PostgreSQL/DRF – Rebuild an E-commerce
website for selling physical and digital products using Paypal and/or Braintree as payment gateway. NextJS
fetch the data from the Django API using Axios and displays it on the page so the client can generate the
desired order. Once the order is created, a POST method is send to the API and the order is created inside
the database.

**<u>Side projects</u>**: A list of some relevant side projects that I'm working on:

- Pathfinding visualization application & BingGPT chat App Pathfinding algorithm visualization application using C++ and SFML, using various complex pathfinding algorithms like (BFS, DFS, Dijkstra and A\*) to measure their times in completing the selected path. Also building an asynchronous BingGPT chat desktop application with Python and Tkinter that interacts with BingGPT, this allows for easy interaction with BingGPT without the need to open a browser.
- **Eunomia** Code assistant that uses open source GPT large language models to analyze local code. The assistant is build using Python, Langchain and ChromaDB. Add the moment only GPT4All models are supported. Working on GPU support to optimize the model response time.
- **CS Stickers API & UI** A Counter-Strike API using ASP.NET and FastAPI to retrieve relevant information about the game stickers and capsules (24h price, all time high, amount sold, etc.) and display it in a UI build with .NET MAUI. The idea is to give the user the ability to compare the prices of the items and how their prices have changed over time.
- Visit My Portfolio or GitHub to see more of my projects.

<u>Trainee of a Maritime Engineer specialized in corrosion (NACE Level 4)</u> · Houston, TX 77433 (Oct. 2015 – Jan. 2016): Acquired basic knowledge in the area of cathodic protection related to the analysis of the measurements that influence corrosion.

- Assistance to seminary about **cathodic protection (CP)** sponsored by NACE (National Association of Corrosion Engineers) international.
- **Visits in-field** with the NACE Level 4 engineer with the objective of familiarizing with the instruments used for the measurement process of corrosion.

# **LANGUAGES**

· Spanish (Native) · English (High) · French (Intermediate) · Japanese (Basic)