# JACOB TINOCO

### **DEVELOPER AI**

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#### BACKGROUND

Programmer with 4 years of experience in Python and C++. Proficient in individual and team environments, with research experience in Artificial Intelligence and Computer Vision. Used tools such as n8n, Amazon Alexa Skills, OpenCV, Ollama, Mediapipe, and TensorFlow, Numpy, Matplot. Skilled in social communication, interpersonal development, and remote work. Highly responsible, self-taught, and a team player with a keen interest in artistic, philosophical and scientific knowledge.

#### **EDUCATION**

Bachelor's Degree in Mechatronics Engineering: Speciality in Process Automatitation. Computer Science Technician, Specialty in computer science. Awards: 1st: Introduction to Artificial Intelligence with Artificial Neural Networks (ANN), 2019. 3rd: Development and implementation of security systems using home automation, 2019.

#### Relevant courses:

- Google Data Analytics Professional Certificate
- Machine Learning with Python by IBM
- Data Analysis with R Programming by Google
- Prepare Data for Exploration by Google

- Process Data from Dirty to Clean by Google
- · Practical Python for AI coding 1 by KAIST
- Analyze Data to Answer Questions by Google
- Share Data Through the Art of Visualization by Google

#### **EXPERIENCE**

#### IMPLEMENTATION OF 3 LEAP MOTION CONTROLLER DEVICES ON ONE COMPUTER | **PROGRAMMER**

Querétaro, Mx, 2023 - 2024

In this project, I performed the development of 13 static gesture tracking algorithms using three LMC (Leap Motion Controller). Implementing programming skills in Python, (mastering libraries such as: Pandas, NumPy, matplotlib), for data processing, and use of C++ language to program such sensors, mastering in C++ the Leap Motion API for developers. By combining three sensors, the field of view is enlarged by 266% and the reading confidence is increased by 12%. Perform additional activities of documenting my processes, weekly reports and monthly reports, working as a team through effective communication in weekly meetings and constant communication with team members.

#### **GESTURE AND HUMAN IDENTIFICATION AND TRACKING | DEVELOPER AV**

Ouerétaro, Mx, 2024 - 2025

I developed Backend skills such as version control, creating my own API's and understanding third party API's, analytical thinking, project organization, problem solving and identification skills, scalable project capabilities. I made use of my mastery in Python with the following libraries: OpenCV, Numpy, Pandas, YOLO in its versions V3, V5, V11; I also developed skills in the use of Tensorflow, Keras. The goal is to develop an algorithm that allows the identification and tracking of gestures and people in real real time and then take it to LSM interpretation.

#### AI, CHAT-BASED VIRTUAL ASSISTANT GPT FOR DEV'S. | DEVELOPER, GENERATIVE AI

Estado de México, Mx, 2024 - 2025

This project focuses on the development of a virtual assistant based on Chat GPT, using open source models provided by Ollama. I implemented the languages Pyhton, for the internal programming of the application, javascript for the graphical interface. I learned to use Django and Flask to create my API's, NLTK and SpaCy for NLP processing and text analysis. I used the Ollama developer documentation and implemented the PythonCoder V2 model. Along the way I improved my project documentation skills, developed my testing and validation skills and adapted to new tools.

#### SKILLS AND ABILITIES

- Artificial Intelligence
- Artificial Vision

Data

- Chatbots development n8n
- Version control.
- Adaptation of new tools.
  OpenCV
- Python

Matplotlib

- English: B2 French: A1

  - Italian: A2

• Self-taught

- Tensorflow Self-learning.
  - Continuing education.
    Empathy

Teamwork.

- Critical Thinking
- Analytical Thinking

• Employee relations.

- Data analysis with R
- Data analysis with Python

• Data analysis with excel

- Machinne learning
- · Deep learning
- Effective communication Data visualization

#### **EXPERIENCE**

#### CNN, CLOTHING RECOGNITION | DEVELOPER, GENERATIVE AI

Estado de México, Mx, 2025

Using tools such as **Keras** and **Tensorflow**, a **CNN**-type AI model was developed for clothing recognition. It takes 125x125 px images as input, classifies them, and makes a prediction that determines the type of garment recognized by the model. In the second week of April 2025, five models were trained, of which three were successfully trained and two failed due to hardware limitations. I improved my skills in data processing and analysis, and **RNN and CNN AI model generation** and training. Its application extends to areas such as surveillance and quality control, streaming monitoring of production lines. Project in progress at my job at Maxima Apparel.

#### DATA EXTRACTION VIA API'S | SCRIPTING

Estado de México, Mx, 2025

These projects documented and consolidated API integration coverage over the last six months (April-September 2025), including Amazon SP-API, DHL MyDHL, and FedEx Webhooks. Endpoints were classified into categories such as "always accessible, empty, and dependent on future data," allowing for process standardization and future expansion planning. In addition, documentation practices, monitoring, and availability classification were implemented. The API management projects strengthened skills in logistics, e-commerce, and analytics service integration, contributing to the construction of a more robust and scalable automation architecture. It also represented a key exercise in managing diverse API's, ensuring clearer control of the status of each integration and laying the foundation for future growth of the enterprise services ecosystem.

#### GENERADOR DE SKUS EN ILLUSTRATOR | AUTOMATION DEVELOPMENT

Estado de México, Mx, 2025

During the latest update, the project developed emergency scripts to ensure the continuity of graphic processes in Illustrator when CSV files are unavailable. Enhanced versions of previous scripts, created by me in May 2025, incorporated graphical interfaces with Tkinter, automatic equipment detection, TXT report generation, and detailed log tracking. Since May 2025, these improvements have optimized work time, saving an average of 60 hours per month per worker in the design area, which has approximately 40 employees. These innovations increased usability and reduced errors in material production. Advanced skills in Python, GUI development, Illustrator automation, and backup flow design were reinforced. Additionally, real-time validation techniques and automatic reports for missing nodes were implemented, allowing for more efficient management. This project was key in strengthening the resilience of the design area and ensuring reliable deliveries in critical scenarios.

#### **AUTOMATIC REPORTS, N8N LOCAL AND CLOUD | AUTOMATION DEVELOPMENT**

Estado de México, Mx, 2025

The project allowed us to develop skills in data visualization, report automation, integration of multiple services (DHL, Google sheets, code tool, html tool, Fedex, internt data sets, postgresql...) and effective communication with stakeholders, ensuring transparency in monitoring the chatbot's performance. This project implemented flows in n8n to generate weekly chatbot reports, consolidating metrics such as the number of FAQs answered, tickets created, orders processed, and errors detected. The flows integrated Google Sheets to obtain data, JavaScript nodes to process the information, and QuickChart to graph the results. Histograms of chats and messages were generated, as well as graphs of FAQ and error distribution. The system sent the reports by email to internal teams, standardizing communication and reducing manual work.

#### **AUTOGENERATED TECHPACKS IN ILLUSTRATOR | ODOO AUTOMATION DEVELOPMENT**

Estado de México, Mx, 2025

Automated the creation of TechPacks in Illustrator from a consolidated CSV file, designed for future integration with Odoo for data extraction from our internal database. The system duplicated workspaces based on active leads, replaced text, applied RGB colors, inserted images, and exported final files in .ai and PDF formats. The workflow included node validation, cleaning of inactive elements, and dynamic template selection. Implemented on macOS with JSX and AppleScript integration, the project optimized graphic document production. This initiative enhanced skills in software integration, automated workflow design, and high-quality file generation while reducing manual errors and accelerating material delivery for future industrial and graphic design projects.

#### **EXPERIENCE**

## XLSX GENERATOR, BASED ON TEMPLATES, DICTIONARIES, DATABASES | PROCESS AUTOMATION

Ciudad de México, Mx, 2025

The project strengthened skills in data processing, automatic validation, exception handling, and catalog normalization. It also consolidated expertise in creating customized tools for the production area, ensuring efficiency, standardization, and traceability in the delivery of files to customers. The application automated the generation of Liverpool templates from PLM data in CSV or Excel formats. The system validated sizes and colors with predefined dictionaries, generated an XLSX file by garment category, and presented an ASCII preview along with detailed logs for auditing. The graphical interface simplified its use for non-technical staff, while packaging as a desktop application allowed for deployment on multiple computers.

#### Maxi - Customer service chatbot | DEVELOPER n8n

Estado de México, Mx, 2025

Managed messages and cases related to product returns and exchanges through a chatbot that **reduced customer service ticket creation by 40%**. The system **filtered frequently asked questions** and **identified challenging customers**, preventing unnecessary tickets. This unified workflow in n8n was designed to assist customers in **Mexico** and the **United States**. It integrated with **Shopify**, **Zendesk**, and **DHL** to **manage orders**, **tickets**, and **tracking** while providing **automated responses to FAQs**. The system included strict validation for ticket creation and logged all interactions in Google Sheets for analysis and weekly reporting. Credential management was improved, security was enhanced, and processes were standardized across regions. Throughout development, skills in workflow design, **applied NLP**, and automation best practices were strengthened. The result was a robust and adaptable system optimized for scalability and consistent responses across two markets.

## AI, CHAT-BASED VIRTUAL ASSISTANT GPT FOR DEV'S | DEVELOPMENT OF GENERATIVE AI, LLM

Estado de México, Mx, 2025

This virtual assistant was designed to support developers using Ollama's open language models. The backend was implemented in Python and the interface in JavaScript, using frameworks such as Django and Flask to create API's. Natural language processing techniques were applied with NLTK and SpaCy, and the PythonCoder V2 model was integrated to improve the interpretation of technical queries. The project strengthened skills in documentation, test validation, and adaptation to new NLP environments. It also allowed for exploration of the scalability of intelligent assistants and their integration into collaborative development environments. The result was a system capable of answering technical questions, guiding workflows, and demonstrating how language models can be effectively applied in the field of software development and automation.