



# VICTOR TERRÓN MACIAS

MS. SOFTWARE ENGINEER

## EDUCATION

Technical Career.

- Technological University of Tlaxcala.
- Mechatronic Engineering.
- 2018-2020.

Degree.

- Technological University of Tlaxcala.
- Technotronic Engineering.
- 2020-2022.

Master's degree.

- Research Centre of Mathematics A.C. (CIMAT A.C.).
- Software Engineering.
- 2022-2024.

## LANGUAGE

English.

- TOEFL ITP 510 points and Duolingo English Test 115 pts.

Spanish.

- Naïve Language.

## OTHER INFORMATION

A valid passport.

Available for relocating.

## ABOUT ME

I am a Python developer with over three years of experience using various frameworks such as DJANGO and Flask. My M.S. degree as a Software Engineer and background give me expertise in software models, methodologies, and standards implementation (traditional and agile), testing, and Artificial Intelligence model deployment in web applications. I have honed my ability to create robust and efficient solutions, which I'm eager to apply in the context of test automation and software development, this resonates with my commitment to engineering excellence. I am enthusiastic about the chance to interface with other teams and disciplines.

I am familiar with project management tools and am confident in my ability to adapt to new systems quickly.

## SKILLS

- Python development: 3 years focusing on DJANGO and Flask frameworks for web applications development, but with experience developing scripts and other apps.
- AI model implementation: 2 years.
- Software Development: 2 years developing custom software with Python.
- Quality assurance: 1 year with automated unit testing.
- Agile and traditional methodologies and standards: 1-year proficiency in ISO/IEC 29110 standard, SCRUM, and KANBAN, with practical experience implementing software development standards and methodologies.
- Project management: 1 year establishing all the work products associated with the management of software projects according to ISO/IEC 29110 standards.
- Test Automation: 1-year testing implementation using the unit test library.
- Version Control: 3 years using Git and GitHub as a repository for source versioning control.
- Deployment: 4 years deploying solutions on AWS EC2 instances setting all configurations.
- Cloud: 3 years establishing all the configurations needed for firewall forwarding, DNS configurations, domain configurations, reverse proxy, SSL certificates, and Control panel for each instance deployed.

## COURSES AND CERTIFICATIONS

Lean Six Sigma Green Belt – CERTIPROF  
Kanban System Design – Kanban University  
SCRUM Foundations - CERTIPROF  
Network Administration – University of the Valley of Mexico  
Complete Linux Training - UDEMY  
Linux Troubleshooting Course – UDEMY  
ESP32, Firebase, and MQTT – UDEMY  
Entrepreneurship – TREPCAMP  
Personal Brand – PLATZI  
Macro training in Artificial Intelligence – UNAM

## PROFESSIONAL EXPERIENCE

### **BECAANA Dulces**

DJANGO Developer

February 2024 – July 2024 [Remote from Zacatecas, Mexico]

#### RESPONSIBILITIES

Implement ISO/IEC 29110 for project development, establish project objectives and requisites (TRELLO, VSEST 29110), identify and mitigate risks, manage change control processes (GitHub), develop project plans and change requests in compliance with ISO/IEC 29110, automate unit testing (UNITTEST), and develop project plans and timelines (TRELLO).

#### KEY ACCOMPLISHMENTS

Successfully transitioned from manual sales recording in Excel to an automated platform in less than a month. Developed a platform that automates sales registration and provides personalized tickets with unit discounts, taxes, and other relevant information. Achieve high client satisfaction by delivering a robust, user-friendly platform that meets client needs.

### **CIMPS 2023 and CIMPS 2024**

System Administrator

May 2022 – April 2024

#### RESPONSIBILITIES

Server deployment and configuration: configure AWS EC2 instance. Network configuration: configure firewall rules, set up port configurations, and assign elastic IP to instance. Domain and DNS management: Register domains through domain service providers (Namecheap, freenom, ghandi) and configure DNS records to associate domain names with instance elastic IPs. Implement SSL certificate for secure communication over HTTPS—private email configuration. Set up and manage FTP services and reverse proxy using NGINX. Application deployment: deploy and configure the OpenConf application and WordPress—system maintenance and monitoring: server performance, availability, resource utilization, and troubleshoot server-related issues.

#### KEY ACCOMPLISHMENTS

## ACADEMIC PROJECTS

### Project Manager at CIMAT for **BioSuiteT project**

January 2024 – April 2024 [Zacatecas, Mexico] [Bio-Informatics Software Development, B2B]

#### RESPONSIBILITIES

Establish Project Goals. Implement ISO/IEC 29110 standard, with methodologies SCRUM and Kanban (TRELLO with poker planning plugin). Develop project plan, scope (GitHub), and schedules: risk identification and mitigation. Assign tasks and explain the roles and responsibilities of each member. Facilitating communication between team members and customers. Automated unit testing. Monitor project timelines, ensuring deadlines are met and adjusting them (ISO/IEC 29110 with VSEST 29110).

#### KEY ACCOMPLISHMENTS

Early delivery: Successful completion is ahead of schedule. Accelerate project completion, ensuring timely delivery of deliverables. Duration: 3 months, two weeks. Measurement: Comparison of actual completion date with the initially planned deadline and Kanban metrics such as cycle time and throughput. Receive positive feedback from customers regarding functionality, usability, and performance: Enhance client satisfaction by delivering a high-quality product that meets their expectations. Duration: Each meeting will provide and validate functionalities (1 monthly). Measurement: Feedback from customers regarding the functionality, usability, and performance of the delivered product. Deploy Bio-Suite-T locally and in AWS EC2 instance: Ensure accessibility and scalability of the solution by deploying it both locally and on AWS EC2. Duration: 1 day. Measurement: Successful deployment without downtime and increased accessibility of the platform. Obtaining copyright under the team members: Protect intellectual property and recognize team members' contributions. Duration: 1 week. Measurement: Document copyright ownership and acknowledgment from team members. Orchestrate integrating multiple

bioinformatics tools into a unified code-free environment: Improve workflow efficiency by integrating disparate tools into a cohesive environment. Duration: Not specified. Measurement: Streamlined workflow and positive feedback from users regarding the ease of use of the integrated environment. Successfully implemented ISO/IEC 29110 in its basic profile and SCRUMBAN methodology: Ensure adherence to quality standards and improve project management efficiency. Duration: Not specified. Measurement: Successful implementation of ISO/IEC 29110 basic profile and SCRUMBAN methodology, as evidenced by adherence to standards and project performance metrics (lead time, cycle time, work-in-progress, and throughput). Ensure quality assurance through automated testing: Enhance product quality by implementing automated testing processes. Duration: 4 months, along with the project. Measurement: Automated testing procedures reduced the number of defects and improved product stability.

**DJANGO Developer at CIMAT for a tourism project in Government.**

April 2023 – June 2023 [Zacatecas, Mexico] [DJANGO Developer, Artificial Intelligence Software: NLP, B2B]

#### RESPONSIBILITIES

Developed a platform to analyze comments of places using Google Maps API. I implemented a transformers AI model to classify the feelings of the comments. Designed and developed a dashboard that provides insights about the analyzed information. The AI model uses natural language processing to analyze comments.

#### KEY ACCOMPLISHMENTS

Integrated a Transformers AI model for NLP analysis: This enhanced the platform's capabilities for language analysis using the model and automated the process of collecting the comments, improving its efficiency in processing textual content and comment collecting. Duration: 2 months. Measurement: Evaluation of the platform's performance in language classification and user feedback regarding the analysis classifying and statistics quality.

Integrate a GUI to use the AI model in a no-code environment: This improved the accessibility for users who do not know programming language syntax or the prerequisites to execute the model. Duration: 2 months. Measurement: customer feedback.

Automate graph generation based on analysis results: During the analysis processes. Duration: 1 month. Measurement: Adoption of proposed improvements by stakeholders and feedback on the effectiveness of the suggestions in simplifying the implementation process.

**DJANGO Developer at CIMAT for VSEST 29110 project (THESIS Project).**

November 2022 – March 2024 [Zacatecas, Mexico] [DJANGO Developer, Artificial Intelligence Software: NLP, B2B]

#### RESPONSIBILITIES

Developed a platform to support the implementation of ISO/IEC 29110 standard. Designed functionalities allow users to audit a VSE's documentation (Very Small Entity) and see its process. Develop a report function. Implemented features to track project progress and align work products with the standard's guidelines, integrated the OpenAI ChatGPT 3.5 Turbo-0125 model for its contextual token capacity and model refinement capabilities—utilized natural language processing for analyzing textual contents of work products, automating analysis processes. Refine the AI model and improve output using prompt engineering.

#### KEY ACCOMPLISHMENTS

Create a platform enabling users to audit documentation and manage project alignment with ISO/IEC 29110 standard: Streamline the auditing process and facilitate alignment with standards, allowing easy identification and sharing of improvement points among team members and stakeholders. Duration: 17 months. Measurement: Feedback from users regarding the platform's ease of use and effectiveness in managing project alignment with standard. Integrate OpenAI ChatGPT 3.5 Turbo 0125 model for advanced language analysis: Enhance the platform's capabilities for language analysis, improving its efficiency in processing textual content. Duration: 2 months. Measurement: Evaluation of the platform's performance in language analysis tasks and feedback from users regarding the quality of the analysis. Propose process improvement suggestions to simplify the standard's implementation: Enhance comprehension and reduce complexity in the ISO/IEC 29110 implementation process. Duration: 3 months. Measurement: Adoption of proposed improvements by stakeholders and feedback on the effectiveness of the suggestions in simplifying the implementation process. Automate the work product analysis using AI models that provide insights to improve work products: Improve the efficiency and effectiveness of work product analysis by automating processes

and providing actionable insights for improvement. Duration: 17 months. Measurement: Reduction in the manual effort required for work product analysis and user feedback regarding the usefulness of insights provided by AI models.