

Experience

- IMPSA** Mendoza, Argentina
IA Engineer July 2024 – Present
- Developing a fault detection system for solar panels using artificial intelligence. Thermal images are collected by a drone, and malfunctions are identified and categorized by type using computer vision.
- Automation Engineer November 2021 – Present
- Developed and designed a Programmable Logic Controller (PLC) program and Human-Machine Interface (HMI) for a butterfly valve at a hydraulic power plant.
 - Developed and designed Programmable Logic Controller (PLC) program, Human-Machine Interface (HMI) and Supervisory Control and Data Acquisition (SCADA) system for a level luffing crane system using TIA Portal, for the Argentina Navy.
 - Developed and designed Programmable Logic Controller (PLC) program and Human-Machine Interface (HMI) for an overhead crane system using TIA Portal, for a nuclear power plant.
 - Resolved issues in power plants through remote interventions, offering efficient solutions to challenges associated with databases and SCADA systems.

Education

- Universidad de Buenos Aires** Buenos Aires, Argentina
Artificial Intelligence Specialist October 2023 - Present
- Universidad Nacional de Cuyo** Mendoza, Argentina
Mechatronics Engineer November 2022
- Recognition for academic performance (2022).
 - 1st place - Contest Design and Development of Robots for Productive or Service Applications - Preliminary design (2021).
 - 3rd place - "Emprende U, Premio FUNC 2021 a la Innovación" - Awards to innovation (2021).
 - 1st place - Process Simulate international challenge (2021).
 - One year of formal coursework in Artificial Intelligence.
- Capitán Daniel Manzotti** Mendoza, Argentina
Electronics Technician December 2012
- National flag bearer (the first in the class).

Technical Skills

Data and Software Engineering:

- Python (Numpy, Pandas, Scikit-Learn, Matplotlib, SeaBorn)
- Machine Learning (SVM, Decision Trees, Random Forest)
- Deep Learning (CNN, RNN, Encoder-Decoder, Transfer Learning)
- Evolutionary algorithm
- Time series analysis

Industrial Automation

- Computer Vision (Open CV, Pytorch, Pytorch Lightning)
- Natural Language Processing (Tensorflow, Keras)
- Diffusion models
- Generative IA tools
- Label Studio
- SQL
- Java
- PLC programming
- HMI design
- SCADA development
- TIA Portal (Siemens)
- Schneider
- Indusoft SCADA
- Matlab
- Atmel Studio (AVR) and Arduino
- C/C++

Language: Spanish (native), English (B2).