

# Axel Mendoza — Senior ML Engineer

Paris – 75003 – France



linkedin



blog



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website



github

*Advancing the frontier of AI through innovative Machine Learning solutions and efficient MLOps practices*

## Technical Skills

### Programming Languages:

Python

SQL

C++

### Tools:

Terraform, Terragrunt, Dagster, Airflow, Docker, CI/CD, ZenML, MLflow, Airbyte, DBT, Git, Unix

### Python Frameworks:

PyTorch, TensorFlow, Keras, OpenCV, Scikit-learn, Numpy, Pandas, Matplotlib, Seaborn

### Google Cloud Platform (GCP):

- Vertex AI
- Feature Store
- Cloud Run
- Cloud Storage
- Pub/Sub
- Compute Engine
- BigQuery
- Virtual Private Network

### Domain of Expertise:

- Deep Learning
- Medical Imaging
- Object detection
- Multi Object Tracking
- Object Re-Identification
- Recommender System

## Papers

### Deep Learning for Vessel-specific Coronary Artery

European Heart Journal, 2021

- Co-author for Oxford University world famous journal at Siemens.

## Projects

### Machine Learning Blog

PyTorch, Terraform, CI/CD, Numpy, Pandas, Seaborn

- Writing articles about Data Science, Data Engineering and MLOps

### Autonomous RC Car

Python, Keras, OpenCV

- Remote-controlled car that predicts speed and steering angle in real-time.
- 3rd at IronCar Summer 2018 and 1st at RobotCars Winter 2018 tournaments.

## Experience

### TRINOV

Senior ML Engineer, Paris

Avr 2023

Current

- **Leading a team** of 5 data scientists
- Created an **AI infrastructure** with Terraform, Vertex AI and ZenML
- Built an **ETL pipeline** with Airbyte, DBT, BigQuery and Dagster
- Designed a **real-time recommendation system** using Vertex AI Feature Store

### BOXY

Computer Vision Engineer, Paris

Dec 2020 - Avr 2023

27 months

- Designed person tracking and re-identification systems for an **autonomous grocery store**.
- Created a semi-automatic **annotation pipeline** to generate data for Deep Learning using Airflow and GCP.
- Managed and trained a team of 4 annotators on bounding box and pose video annotation.

### SIEMENS

Computer Vision Engineer, US

Apr 2019 - Jun 2020

14 months

- Improved physician diagnosis of **heart disease** with the Unet architecture and Pytorch.
- Improved heart disease diagnosis by **classifying calcium** in high and low risk arteries.
- Enhanced detection of **mitral valve regurgitation** by creating a blood flow dealiasing model using Unet trained on 3D color doppler data using Pytorch and C++.
- Automated the training of these algorithms using AirFlow.

### ENGIE

Computer Vision Intern, Paris

May - Nov 2018

7 months

- Improved security of power-plants by designing a **multi-camera vehicle re-identification and tracking** system using Keras and TensorFlow.

### SAP

Software Engineering Intern, Paris

Feb - Jul 2016

5 months

- Improved the quality of an excel pluggin by designing an **automatic testing platform** using SQL and Python.

## Education

### EPITA

Computer Science, Data Science Major

2013 - 2018

5 years

- **Top 10** computer engineering master degree and machine learning program in Paris.