

Axel Mendoza — Computer Vision Engineer

Paris – 75003 – France

 website  github  axelmendoza@hotmail.fr  blog  linkedin

Looking for exciting Deep Learning or MLOps opportunities

Skills

Programming Skills:

Python

SQL

C++

Frameworks: PyTorch TensorFlow Keras OpenCV
Sklearn Numpy Pandas Matplotlib

Tools: AirFlow Git Unix CI/CD Docker CloudRun TensorRT

Expertise:

- Medical Imaging
- Object detection
- Multi Object Tracking
- Object Re-Identification
- Pose Estimation
- Autonomous Driving

English: Fluent

lived in the US

Spanish: Bilingual

hispanic origins

French: Native

mother tongue

Papers



Deep Learning for Vessel-specific Coronary Artery
European Heart Journal, 2021

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

Projects

Autonomous RC Car   **2017**
Python, Keras, OpenCV **12 months**

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

Machine Learning From Scratch   **2020**
PyTorch, Numpy, Pandas, Seaborn **3 months**

- From scratch implementation of the most used algorithms in machine learning.

Experience

BOXY

Dec 2020

Computer Vision Engineer, Paris

Current

- Designed person tracking and re-identification systems of an **autonomous grocery store**.
- Enhanced **product attribution** using Pose Estimation.
- 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

Apr 2019 - Jun 2020

Computer Vision Engineer, US

14 months

- Improved physician diagnosis of **heart disease** by creating a coronary calcium detector trained with Unet and Pytorch.
- Improved heart disease diagnosis by **classifying calcium** in high and low risk arteries.
- Optimized model complexity to fit hospital needs by designing a faster approach using ResNet3D.
- 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

May - Nov 2018

Computer Vision Intern, Paris

7 months

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

SAP

Feb - Jul 2016

Software Engineering Intern, Paris

5 months

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

Education

EPITA

2013 - 2018

Computer Science, Data Science Major

5 years

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