

Axel Mendoza | Computer Vision Engineer

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[website](#) [github](#) [blog](#) [linkedin](#) [mail](#)

*Deeply passionate with Computer Vision,
I am open to competitive opportunities*

Skills

Programming Skills:

Python

C++

SQL

Frameworks and Tools: PyTorch TensorFlow Keras
OpenCV Sklearn Numpy Pandas Matplotlib AirFlow
Git Linux

Deep Learning: Computer Vision for Medical Imaging,
Object Re-Identification & Tracking and Autonomous
Driving.

Machine Learning:

- Support Vector Machines
- Decision Trees, Random Forests, AdaBoost
- K-means, Gaussian Mixture Models
- Naive Bayes
- K-Nearest Neighbors
- Polynomial Regression
- Logistic Regression
- Linear Regression

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 while working 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.

Experience

Storelift

Dec 2020

Computer Vision Engineer, Paris

Current

- In charge of redesigning the person tracking and re-identification system of an autonomous grocery store.
- Improved the vision systems by creating a semi-automatic annotation pipeline.

Siemens US

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 workflows and Celery.

Engie lab Crigen

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.
- Implemented 2018 **state-of-the-art** solution and improved mean average precision by 6% by adapting a pedestrian re-id **paper** to vehicle tracking.
- Collaborated with the best researchers in the field after being invited to ECCV 2018.

SAP

Feb - Jul 2016

Software Engineering Intern, Paris

5 months

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

Education

EPITA

Apr 2018

Computer Science, Data Science Major

5 years

- **Top 10** computer engineering master degree and most prized machine learning program in France.