

# Axel Mendoza | Data Scientist

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*Data Scientist with two years experience in  
AI research seeks a full time opportunity in Paris*

## Skills

### Programming Skills:

Python C C++ SQL

**Frameworks and Tools:** PyTorch TensorFlow Keras  
OpenCV Sklearn Numpy Pandas Seaborn Matplotlib  
Hyperopt Docker AirFlow Celery Git Jenkins Jupyter

**Deep Learning:** Medical Imaging, Object Re-  
Identification and Tracking, Autonomous Driving, Auto-  
Encoders.

### Machine Learning:

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

## Education

### EPITA 2018

Computer Science, Data Science Major 5 years  
Top 1 computer engineering master degree and most prized  
machine learning program in France.

### Sejong University - South Korea 2015

Computer Science, Seoul 6 months  
Exchange student program at Sejong University.

## Languages

**English:** Fluent *lived in the US*  
**Spanish:** Bilingual *hispanic origins*  
**French:** Native *mother tongue*

## Experience

### SIEMENS 2019

Machine Learning Intern, Princeton 14 months

- Improved physician diagnosis of heart disease by creating a coronary calcium detector trained on CT scans using Unet with Pytorch.
- Improved patient's disease evaluation even further 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.
- Automated the training of these algorithms using AirFlow workflows and Celery.

### ENGIE 2018

Machine Learning 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.
- Designed a framework to automatically re-train on different objects like pedestrian, faces, ect...
- Collaborated with the best researchers in the field after being invited to **ECCV** 2018.

### SAP SE 2016

Software Engineering Intern, Paris 5 months

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

## Projects

### Autonomous RC Car 2017

Python, Keras, OpenCV 12 months

- Built a remote-controlled car able to predict speed and steering angle in real-time from an embedded camera.
- Participated in tournaments and got 3rd at **IronCar** Summer 2018 and 1st at **RobotCars** Winter 2018.

### Machine Learning Blog 2020

PyTorch, Numpy, Pandas, Seaborn 3 months

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