# **Axel Mendoza** | Data Scientist

3 Rue Morand - 75011 - Paris

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

### **Skills**

### **Programming Skills:**

**Python** 

C++

**SQL** 

**Frameworks and Tools**: PyTorch TensorFlow Keras OpenCV Scikit-Learn Numpy Pandas Matplotlib Docker AirFlow Celery Git Unix Spark AWS

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

### Machine Learning:

- Support Vector Machines
- o Decision Trees, Random Forests, AdaBoost 3
- K-means. Guassian Mixture Models
- Naive Bayes
- K-Nearest Neighbors
- o Polynomial Regression 3
- Logistic Regression \$\infty\$
- 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: Fluentlived in the USSpanish: Bilingualhispanic originsFrench: Nativemother tongue

### **Experience**

#### SIEMENS US **4**

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 using Pytorch and C++.
- 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 multicamera vehicle re-identification and tracking system using Keras and TensorFlow.
- o 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 **4** 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.