# Andrés Ladino, PhD

### **Electrical Engineer & PhD in Automation**

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Paris, France

### **EXPERIENCE**

### Data Scientist - RATP Group / Talan

**Since 01/2022** 

Paris. France

• Improving maintenance information tools via predictive analytics for railway systems. Developed AI technologies/algorithms for predictive maintenance, reducing diagnostic times in 1.5x.

### Research Engineer - IFSTTAR / UGE

**i** 01/2018 - 11/2021

Lyon, France

• Lead the ENSEMBLE traffic team for assessment evaluation. Designed software, data collection protocols and experimental design. 6 largest european OEMs participated in the experiment. Implemented (Python, C++) platooning software architectures and interfaces with microscopic traffic simulators (Vissim and Symuvia)

#### Research assistant - CNRS / INRIA

**1** 09/2014 - 09/2017 (3 Years)

Grenoble, France

• Developed in cooperation with DIR-CE the traffic use case GTL for the SPEEDD project. Conceived new real time forecasting algorithms for traffic networks

### **Graduate researcher - IPAM**

 Presented key research results as a Visitor Researcher at UCLA (+50 attendees). Designed statistical learning algorithms to estimate and predict travel time in traffic networks.

#### Instructor Professor - Pontifical Xaverian University

**1** 01/2011 - 08/2014 (3 Years)

Bogota, Colombia

• Developed the communication program for the EU ADDE SALEM project, performed interviews to 10 key stakeholders of joint degrees in between Latin America and Europe. Instructed courses for (+150 students) in 3rd year: Automatic Control, Automatic Control Laboratory and Dynamical Systems.

#### **Process Analyst - IBM**

**i** 08/2007 − 04/2009 (1<sub>1/2</sub> Years) 
■ Bogota, Colombia

• Responsible for documentation of Operational Service Manuals (OSM) jointly with IT management team for 3 main projects: Customers: Avianca (>50 users), Belcorp ( $25\sim50$  users), Colseguros ( $25\sim50$  users),

## **PROJECTS**

• ENSEMBLE - European Union/IFSTTAR

**2018-2021** 

Lyon, France

SPEEDD - European Union/CNRS

**2014-2017** 

Grenoble, France

ADDE SALEM - EU | Pontifical Xaverian University

**2018-2021** 

Bogota, Colombia

# **PUBLICATIONS**

# **EDUCATION**

### Ph.D. Automatic Control

Université Grenoble Alpes

# 09/2014 - 09/2018 ♥ Grenoble, FR

### M.Eng. Electronic Engineering **Pontifical Xavierian University**

**=** 07/2009 - 12/2011 ■ Bogota, CO

### B.Eng. Electronic Engineering **Pontifical Xavierian University**

**ii** 01/2003 - 09/2008 **●** Bogota, CO

### **TECHNICAL**

Software Architecture

**Automatic Control** 

Statistical Learning

Deep Learning

### **Programming Languages:**

Python: (Proficient) Libraries: Pandas, Numpy, TensorFlow, Dask, PySpark, Scikit-learn

C++: (Comfortable) Libraries: Boost, Symu-

Matlab/R: (Comfortable)

Shell

Julia/Go: (Beginner)

Tools:

Linux

CMake Docker

**Data Tools:** 

SQL

# **OUALIFICATIONS**

Data Scientist with Python

- Machine learning in Python

Digital Transformation Using AI/ML - GCP

# **AWARDS**

#### Honorable Mention, Master Thesis - PUJ

**April**, 2012

Bogota, Colombia

### 2nd Prize, M.Sc Student Thesis Contest-IEEE

October 2012

Las Vegas, USA

#### PhD Scholarship - CNRS

October 2014

Grenoble, France

### Research visitor scholarship - IPAM/UCLA

Ctober 2015

Los Angeles, USA