

## Address

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## Web & Git

linkedin.com/in/diego-  
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## Programming

Python (>4 years)

Numpy, Jupyter,  
Tensorflow, Matplotlib,  
Pandas, Keras

R, MATLAB (>1 year)

C++, C, SQL (<1 year)

L<sup>A</sup>T<sub>E</sub>X(> 2 years)

## OS Preference

Windows XP, 7 & 10  
Ubuntu 16.04

# Diego Porres

Applied Mathematician, AI & Machine Learning Enthusiast

## Experience

05/17 - 10/17 **Internship** [Advanced Driver Assistance Systems/Computer Vision Center, Barcelona, Spain](#)

- Researched how the then state-of-the-art algorithm (specifically, the A3C) in Reinforcement Learning can be applied to self-driving cars.
- Used Atari 2600 games and flash games via OpenAI's Gym and Universe environments to test and train agents.
- Presented how newly published algorithms could be used on future projects to realize specific tasks, such as changing lanes.
- Thesis activity carried for the MSc. degree carried out during this internship.

07/14 - 05/15 **Lecturer** [Universidad Francisco Marroquín, Guatemala City, Guatemala](#)

Designed the syllabus, lectures, homeworks, test and quizzes for the courses of Statistical Thinking & Data Analysis and Calculus 3 (Multivariate Calculus).

03/11 - 05/12 **Internship** [Clínica de Radioterapia La Asunción, Guatemala City, Guatemala](#)

- Conducted quality control tests on the CAT3D software used in the clinic for the planning of radiotherapy sessions and radiosurgery, conforming to the International Atomic Energy Agency (IAEA) protocol TRS No. 430.
- Thesis activity for the Bachelor degree carried out during this internship.

## Education

2015 - 2017 **Master of Math. and Interactions & MSc. in Mathematical Engineering**

[Université Nice-Sophia Antipolis, Nice, France](#) & [Università degli Studi dell'Aquila, L'Aquila, Italy](#)

- Received a double degree from the Erasmus Mundus+ Master program Mathematical Modelling in Engineering (MathMods).
- Received a Erasmus+ Scholarship covering the full 2 year Master degree.

*Main subjects:* Numerical Solutions to PDEs, Stochastic Calculus & Control, Statistics and Probabilistic & Numerical Methods.

**Thesis title:** "Reinforcement Learning for Self-Driving Cars".

**Supervisor:** Antonio M. López, PhD., head of R&D Group ADAS

2007 - 2012 **Bachelor's Degree in Physics** [Universidad del Valle de Guatemala, Guatemala](#)

*Main subjects:* Physics and Mathematics, Statistics, Programming, Numerical & Mathematical Methods for Physics, Relativity and Quantum Mechanics.

**Thesis title:** "Quality Control in the Information Acquisition of the patient using the CAT3D Computerized Planning System for Cancer Treatment".

**Supervisors:** Erick Hernández, MSc. & Ricardo Contreras, MSc.

## Certifications

03/2018 **Deep Learning Specialization** [Coursera. E-learning](#)

*The five interconnected courses, imparted by Prof. Andrew Ng, show how to build some of the latest AI algorithms from the ground up, first using NumPy to later moving to higher level languages like Tensorflow and Keras. The courses concentrated on theory and their applications in industry, like Computer Vision, Natural Language Processing, Speech Recognition, among others.*