

# JUAN JOSÉ MADRIGAL MARTÍNEZ

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[LinkedIn](#) [GitHub](#) [Kaggle](#) [Udacity](#)

**Mathematician interested in Educational Technology, willing to explore new ways to bring advanced Mathematics to the world.** Especially gifted for

- Understanding and mastering Mathematics, interrelating all areas and branches
- Lecturing and teaching difficult or abstract concepts, both for beginners and experienced
- Remarkable quick learning

## SKILLS

**Programming Languages:** Python, Java, Android

**Version Control Systems:** Git & GitHub

**Machine & Deep Learning:** SciKitLearn, TensorFlow

**Computer Vision:** OpenCV

**Operating Systems:** Linux, Windows

**Mathematics Softwares:** SageMath, Mathematica

**Web Design:** HTML5 / CSS3 / JS, Angular4

**Typesetting:**  $\LaTeX$

**Languages:** Native Spanish, Proficient English, German and French

## PROJECTS

### People Detector & Tracker

Jun. 2017

- Designed **CV-based detector** for people buying in a shop
- Successfully implemented **real-time tracker** counting entering and leaving people

### Angular4 Front-End of WardenRetail App

Jul. 2017

- Successfully integrated **Material Design** and **ChartJS** Components

## EXPERIENCE

### Artificial Intelligence Engineer

[Warden Automation](#) | Feb. 2017 - Present

- Designing **object recognition and tracking algorithms**

### CEO of Mathifold Project

<http://mathifold.org/>

Madrid | March 2014 - Present

[free, open-source online mathematics for students, teachers and workers]

- Leading **15+ collaborators** including **mathematicians, computer scientists** and **engineers**
- Added **250+ posts** including **theory, exercises, animations** and **applets**, among other useful materials
- Recorded **800+ users** and **12000+ views** in the last 3 months

### Lecturer & Tutor at Faculty of Mathematics

UCM | Sept. 2014 - Present

- Lectured *Intro to Mathematics, Linear Algebra, Real Analysis, Probability & Statistics, Algebraic Topology*
- Taught and tutored **200+ students** both for **undergraduate and graduate courses**

## EDUCATION

### Udacity Deep Learning Nanodegree

Udacity | Aug. 2017 - Sept. 2017

### Udacity Machine Learning Nanodegree

Udacity | Sept. 2016 - Feb. 2017

### Master in Advanced Mathematics

9.81/10 - 3.75/4

UCM | Sept. 2013 - Jul. 2014

### Degree in Mathematics

9.92/10 - 3.87/4

UCM | Sept. 2009 - Jul. 2013

## AWARDS

### National Graduation Award

Sciences | Spain

### Extraordinary End of Studies Award

UCM

### Honourable Mention

49<sup>th</sup> International Mathematics Olympiad, IMO | Madrid | 2008

### Gold Medal

44<sup>th</sup> Spanish Mathematics Olympiad | Valencia, Spain | 2008