

# MIGUEL PEREIRA TORRES COSTA

Worcester College, Walton Street, Oxford, OX1 2HB

## ABOUT

**Nationality:** Portuguese  
**Date of Birth:** 25 July 1995

## PERSONAL SUMMARY

I'm analytically minded, having performed **Data Analysis** with R and Python, **Machine Learning** with tensorflow and **Scientific Computing** with SageMath.

Even though my strong suit is data analysis, **Game Theory** introduced me to the world of **Behavioral Economics**, and Dan Ariely's book *Predictably Irrational* convinced me to further pursue this area.

Hence in the next few years I would be interested in exploring the union between purely rational Risk Analysis and flawed Cognitive Biases via Social Analysis.

## LANGUAGES

**Portuguese** - Native  
**English** - Bilingual Proficiency

## CONTACT

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## ONLINE PRESENCE

**Blog:** migueltorrescosta.github.io  
**Goodreads:** migueltorrescosta  
**LinkedIn:** miguel-torres-costa  
**Github:** migueltorrescosta  
**Medium:** miguelcosta

## MISCELLANEOUS

I'm the owner of a Category B European Driving License, which I take advantage of in long pleasurable and traffic-free drives.

I enjoy trying out new activities, having kept a personal preference for Football, Billiards, Punting, Croquet and Puzzles.

## ACADEMIA

### MMath in Mathematics at Oxford University

Expected Result: First Class Award  
Course End Date – June 2018

Oct 2016 – present

### BA in Mathematics at Oxford University - First Class Award

Classes taken and individual results attained available on request.  
( 3 years ) Oct 2013 – Jun 2016

### High School - Grande Colégio Universal

Final grade: **19.2 / 20**  
( 8 years ) Oct 2005 – Jun 2013

## PROFESSIONAL EXPERIENCE

### Tutor – High School Mathematics (1 on 1 tutorials with 3 students)

- Quickly assessed a person's knowledge and context in order to more efficiently teach and share viewpoints.

( 6 months ) Jul 2017 - Dec 2017

### Data Scientist at Farfetch ( E-commerce platform )

**Supervisor:** Dr Ricardo Sousa

- The team's goal was to continuously improve the product ranking algorithms.
- Shared responsibilities and self coordinated tasks with coworkers.
- Learnt how to navigate internal bureaucracy.

( 6 months ) Jul 2017 - Dec 2017

### Computing the Average Rank of Elliptic Curves at Oxford University

(Summer Project with 15 students)

**Supervisor:** Dr Jennifer Balakrishnan

- Following a 1 week crash course in Elliptic Curves, we adapted algorithms designed by William A. Stein in order to populate databases of Elliptic Curves' invariants.

( 5 weeks ) Jun 2016 - Jul 2016

### Data Scientist Summer Intern at Farfetch ( E-commerce platform )

**Supervisor:** Dr João Gomes

- Self-taught Machine Learning, Python, SQL and R in the first 3 weeks.
- Developed an internal Fraud Detection algorithm for the e-commerce retailer.
- Co authored a paper containing the results with Nuno Carneiro.

( 7 weeks ) Jul 2015 - Sep 2015

## EXTRACURRICULAR

### G-Research Algorithmic Trading Competition (Stock Exchange Simulator)

- Coded a micro transaction strategy in a team of 3 students.
- Strategies were judged by simulating an exchange using historical stock price values and comparing final profits.

**1<sup>st</sup> Place**

5<sup>th</sup> Nov 2014

### London International Youth Science Forum

**Participant** - Entry funded by the Calouste Gulbenkian Foundation.

( 2 weeks ) Jul 2014 - Aug 2014

### Delfos Project

(Mathematical Weekend School for pre-University students)

Met many friends with whom I still share mathematical insights and interesting problems.

- Participated in 8 Math Olympiads, both National and International.
- 3 Bronze Medals, 3 Silver Medals and 2 Gold Medals.

( 3 years ) 2010 - 2013

### Hands on Particles

**Participant** - Masterclasses on Particle Physics organized by the *European Particle Physics Outreach Group*

10<sup>th</sup> Mar 2012