

# Miguel Ribeiro - CV

## PERSONAL DATA

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FULL NAME: Miguel Ângelo Maia Ribeiro  
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BIRTH DATE: 12/03/1996 (23 years old)  
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## PROFESSIONAL EXPERIENCE

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DEC 2018-PRESENT: *Quantitative Analyst - BNP Paribas*  
(Quantitative Research, CIB, Option Pricing)  
I currently work at BNP Paribas, in the CIB group, developing the pricing engine used by the bank to price its derivative products.

JUL 2016-SEP 2017: *Trainee Consultant - Timestamp:BIW*  
(IT, Application Development, Database Management)  
I worked in the development team assigned to the 'CÉOS FCS' application, used currently at one of the biggest portuguese banks.

## EDUCATION

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OCT 2019-PRESENT: Thesis Co-Supervision - '*Keeping the Master Green with Machine Learning*'  
I'm currently co-supervising a Master's thesis that focuses on optimizing continuous integration using Machine Learning algorithms.  
Author: João Lousada (IST), Co-Supervisor: Prof. Rui Dilão (IST)

2016-2018: Master in Engineering Physics  
Instituto Superior Técnico, Universidade de Lisboa  
Throughout my degree I focused mainly on engineering courses, with a particular emphasis on programming.  
GRADE: **18/20** (GPA: 3.6)

2017-2018: Master's Thesis - '*Volatility Models in Option Pricing*'  
Implementation and analysis of stock price volatility models (Dupire, SABR and Heston) to price options. This Master thesis was conducted in a partnership between *BNP Paribas* and *Instituto Superior Técnico*.  
Thesis advisors: Dr. Cláudia Nunes (IST), Dr. Rui Dilão (IST), Claude Cochet (Quant Team, BNP Paribas)  
GRADE: **20/20** (GPA: 4.0)

2017-2018: Study abroad - Erasmus Programme  
RWTH Aachen University, Germany  
I attended several Machine Learning and Big Data courses at one of the main universities in Europe in these subjects.

2013-2016: Bachelor in Engineering Physics  
Instituto Superior Técnico, Universidade de Lisboa  
GRADE: **17/20** (GPA: 3.4)

## SCHOLARSHIPS AND AWARDS

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NOV 2018	<i>Award for the best Master's thesis in the interdisciplinary physics field</i> My thesis was recognised as the best in my university's physics course under the interdisciplinary physics field.
JUN 2017	<i>Global Management Challenge - National Group Stage Winner</i> My team won the 1 <sup>st</sup> place in the national Global Management Challenge's group stage. We represented EDP (Energias de Portugal) on the national final.
2013-2017	<i>University of Lisbon Scholarship (€5,000)</i> I won, for 5 consecutive years, the €1,000 scholarship awarded by the University of Lisbon.

## COMPUTER SKILLS

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### Python

During my time at BNP Paribas I used Python extensively, not only for the development of tools used by the bank's engines to price derivative products but also in many other smaller projects, such as generating and sending data to clients.

### MATLAB, Mathematica

During my studies I took part in several projects using both these engineering tools, including signal analysis and simulation. In the development of my thesis I used MATLAB.

### SQL, PL/SQL

During my Internship in *Timestamp:BIW* I used both SQL and PL/SQL in the development of the 'CÉOS FCS' application. There, I worked with Oracle's *Application Express* and managed some of the databases used.

### C, C++

I developed a number of programs using both C and C++ to simulate natural phenomena, such as particle trajectories and radioactive decay.

## LANGUAGES

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PORTUGUESE:	Native
ENGLISH:	Fluent
GERMAN:	Basic (level B1)
SPANISH:	Basic

## MAIN INTERESTS

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- Quantitative Finance
- Mathematics
- Data Science
- Machine Learning