

EXPERIENCE

2019.11 – 2020.12	Trader <i>Treasury and Debt Management Agency</i>
2021.08 – Present	<ul style="list-style-type: none">Oversaw the execution of Sovereign Debt auctions, exchanges and repurchases on the Bloomberg Auction System (BAS)Negotiated derivative operations for risk management and hedgingIssued multiple opinions on financing operations regarding regional sovereign debt issuance and State Owned Enterprises loansOversaw the development of the benchmark for the active management of sovereign issuances by improving the tool developed (in Python) which determines the best issuance strategy on an efficiency frontier that minimizes cost and risk, according to pre-determined limitsAccomplished the implementation of the benchmark for treasury surplus applications by developing a tool in Python to select, according to pre-determined risk limiting conditions, the best possible assets for the desired goal
2020.12 – 2021.07	Advisor <i>Cabinet of the Secretary of State for Finance, Ministry of Finance</i>
2015.02 – 2019.10	Consultant <i>Technical Unit For The Follow-Up And Monitoring Of State Owned Enterprise, Ministry of Finance</i>
2014.02 – 2015.01	Consultant <i>Aubay</i>
2013.07 – 2014.02	Associate researcher <i>Systems and Robotics Institute – University of Lisbon</i>
2011.11 – 2013.07	Consultant <i>Maksen Consulting</i>
2011.01 – 2011.11	Associate researcher <i>Mathematical Applications Center – University of Lisbon</i>
	<ul style="list-style-type: none">Issued multiple opinions on the Budget and Activity Plans, Corporate Governance Reports and Budget Execution Reports of State Owned Enterprises (SOE)Accomplished the implementation of a reporting tool, lowering the time required to create the quarterly and annual reports from multiple weeks to a few hours by (1) automating the extraction of financial information for more than a hundred SOEs from a web portal using VB.NET; and (2) implementing a robust yet flexible Excel tool, following the <u>FAST Standard</u>, capable of handling large and possibly less than accurate, sets dataDesigned, implemented and managed a local database (Access) aggregating the entirety of the financial information from SOEs, with forms for data extractionImplemented the risk metrics and measuring tools for SOE based on the information provided by the SOEs, macroeconomic variables and forecasting modelsParticipated in the overhaul of sales platform for financial products for Santander Consumer in Germany by elaborating technical and functional requests from the client (Santander Consumer DE) for the development team (Geoban ES)Improved an internal time reporting tool, thereby reducing operational time in consolidating all the different reports into a single, manageable source of informationDevelopment and maintenance of a database for the experimental data collected during the projectImplementation of three apps (iOS, OS X and Windows) used for the analysis of experimental data collected during the project with an intuitive user interface and experienceImproved the workflow time, from one month to a week, of the Fair Value Hedging project at Santander Portugal by replacing numerous repetitive, manual and user error prone steps by automation in VBA which allowed for the release of human resources to be affected to other projectsParticipated in the improvement of the Impairment Model framework at Santander Portugal by conducting a study on the connection between emergence periods of default indicators and economic cycles, following an audit remark from the banking supervisor entityImplementation of a reporting tool under the new Basel-II rules that allowed for a significant decrease in locally undetectable reporting errors, as well as the time required to correct the detectable errorsImplemented, using parallel computation in C++, a model for solving Boundary Value Problems using big clusters of processing units

PERSONAL INFORMATION

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SKILLS
MS Office
Excel ●●●●●
Word ●●●●○
PowerPoint ●●●●○
Power BI ●●●●○
Access ●●●●○
Programming
VBA ●●●●○
Python ●●●●○
SQL ●●●○○
Django framework ●●●○○
Others
Bloomberg (BBG) ●●●○○
BBG add-in for Excel ●●●○○
BQL ●●○○○
LANGUAGES
Portuguese ●●●●●
English ●●●●○
German ●●●●○
Spanish ●●●○○
French ●●○○○
KEYWORDS
Data Driven, Analytic Finance, Risk, Banking, Consultant Statistics, Engineering, Physics

NUNO T. MARTINS

MSc.

EDUCATION

2005.09 – University of Lisbon

2010.11 *MSc Technological Physics Engineering*

- Implemented a stochastic volatility forecasting model (in Wolfram Mathematica) which improved in accuracy when compared to more commonly used models (ARCH, GARCH) while only marginally increasing complexity

CONFERENCES

2011.05 **Chaos, Complexity and Transport (Marseille, 2011)**

- Represented the research group and presented the poster with results of the project “New parallel numerical algorithms for current and future high performance supercomputers”

OTHER QUALIFICATIONS

2017.03 – Physical Exercise Specialist

- 2015.07**
- Obtained my qualifications as a physical exercise specialist (Personal Trainer, Group Trainer) while working fulltime at the Ministry of finance
 - Conciliate a part time job as Group Exercise Fitness instructor at Holmes Place Health Clubs since 2017.06
 - Specialized in Group Fitness Classes for mind and body wellness

PUBLICATIONS

Previsão de volatilidade com ruído browniano fraccionário subjacente (Volatility Forecast with an underlying fractional brownian motion noise process)
Published by Novas Edições Acadêmicas.

ADDITIONAL COURSES

Udemy

- Financial Derivatives: a quantitative Finance View
- Python for Finance: Investment Fundamentals & Data Analytics
- Statistics for Data Science and Business Analysis
- The Data Science Course 2022: Complete Data Science Bootcamp
- Django 3 – Full Stack Websites with Python Web Development

Portal Gestão (Management Portal)

- *Power BI Aplicado à Gestão e Finanças, Nível 2* (Power BI applied to Management and Finance, Level 2)

REFERENCES

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