

Personal info

Name: Francisco Miguel AMARAL DE MESQUITA GABRIEL

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Online presence: GitHub, LinkedIn

Work Experience

Futurae

Since July 2023

Senior Data Scientist (Software Engineer & Data Analyst until March 2024)

- Founding member of the Anti-Fraud Team, leading data exploration and analysis for a fraud-detection PoC using Python and related tools.
- Developed real-time data pipelines with Pub/Sub, Beam (Dataflow), and GCS/BigQuery using Avro schemas—reducing latency by transitioning from batch to streaming processing and minimizing data loss.
- Built dashboards integrating these pipelines into Metabase, enhancing data accessibility and insights for stakeholders, including leadership, sales, and customer success teams.

EU Tax Observatory

April 2022 – April 2023

Data Scientist (Research Assistant for the first 5 months)

- Developed an open-source tool that compiled a public database on multinationals' global allocation of productive inputs, profits, and taxes paid.
- Developed a tool for researchers to search for keywords in a *corpus* of terabytes of leaked documents.

Priberam

March 2021 – July 2021

Junior Software Engineer

- Developed an orchestration module for a large-scale commercial application.

Adelard LLP

March 2020 – December 2020

Consultant

- Assessed Control and Instrumentation systems for the Hinkley Point C nuclear power station.

Education

ENPC / Paris School of Economics

2021 – 2022

MSc in Economic Decision and Cost-Benefit Analysis (16/20)

- **Master's Thesis:** Shifts and Profits within Multinationals and across Jurisdictions
- **Relevant coursework:** Risk (20/20), Cost-Benefit Analysis (19/20), Econometrics and Data Analysis (18/20).

KU Leuven

2017 – 2019

MSc in Computer Science, Magna Cum Laude

- **Master's Thesis:** Implicit Type Conversions
 - Extended the KUL Haskell Compiler to support transitive, parametric, and locally scoped implicit type conversions.
- **Relevant coursework:** Data Mining (19/20), Formal Systems and Their Applications (19/20).
- Specialized in the *Secure Software* track, taking courses such as Cryptography and Network Security, Advanced Methods in Cryptography, Security of Network and Computer Infrastructure, Internet Infrastructure, and Development of Secure Software.

Universidade de Lisboa - Instituto Superior Técnico

2013 – 2017

BSc in Applied Mathematics and Computation, with Distinction (15/20)

- **Relevant coursework:** Numerical Analysis (19/20), Object-Oriented Programming (18/20).

Skills

<i>Programming</i>	Python, Scala, SQL, C#, R, Haskell, Java
<i>Data Eng</i>	Beam, Spark, Avro, git, GitLab/GitHub CI/CD
<i>Data Sci</i>	pandas, Keras, scikit-learn, NumPy
<i>GCP</i>	BigQuery, Pub/Sub, Dataflow, Dataproc, Cloud Storage
<i>Languages</i>	Proficient in Portuguese and English

Misc.

- Created, developed (with Python, Github and Jekyll) and maintain:
 - Açores.net, a platform promoting active citizenship in the Azorean community. It provides analytical insights and automated daily RSS feeds on the activity of the regional government and legislative assembly.
 - INE-updates, a website tracking daily updates and newly introduced indicators from INE/Statistics Portugal. Features open-source analyses with publicly available code.
- Advocate for direct, transparent communication and to-the-point discussions, while maintaining a friendly tone and a touch of humor.