Tiago Miranda

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in LinkedIn | % Website: https://tiagojosemiranda.github.io

Education

🎓 **Masters Degree in Engineering and Data Science** - Instituto Superior Técnico, Lisbon, Portugal 2022 – now
- Relevant coursework: Machine Learning, Deep Learning, Natural Language, Multivariate Analysis, Information Systems and Databases, AI and Decision Systems, Processing Big Data
- Currently working on the Masters's Thesis "Using embeddings to infer diagnostics from medical prescriptions" in collaboration with the research group Social Physics and Complexity Lab (SPAC)
- Current Grade: 17/20

🎓 **Bachelor Degree in Engineering Physics** - Instituto Superior Técnico, Lisbon, Portugal   2018 – 2022
- Relevant coursework: Probabilities and Statistics, Programming, Computational Statistics, Computational Mathematics, Computational Physics, Statistical Physics
- Grade: 14/20

🌐 Languages: fluent in Portuguese (native language) and English (Cambridge certificate of B2 level) and intermediate level in French (level A2.2)

Work experience

- First stage researcher (R1) at **Social Physics And Complexity Lab (SPAC) @ LIP**   mar/2022 – sept/2022
  - Did research in the scientific subject of Computational Social Sciences in the framework of the EU-funded project **"FARE, Fake News and Real People – using big data to understand human behaviour"**
  - Analysed retweet cascades to study the spread of ideas on Twitter through the prism of complex networks
  - Member of a multidisciplinary international team that built a database from SNS urgent care and prescriptions data
  - Received a research scholarship by Fundação para a Ciência e Tecnologia (FCT)
- Tutored different subjects to underprivileged kids   2018 – 2023
  - Project developed with Jerónimo Martins' scholarship from 2018 to 2022 and afterwards in a volunteering regime

Projects

</> Biased New World - User's consumption habits of entertainment and unconscious biases (Python)
- Software with the Netflix and/or Spotify user's consumption habits and individual biases
- Recommendation algorithm that suggests different content than the one consumed by the user in order to broaden their horizons

</> Insurance premium calculation (Python)
- Calculation of a fair car insurance premium based on data of previous claim sizes and number of claims as well as in-depth analysis of individuals' risk parameters
- Problem solved in the ECMI Modelling Week 2023 held in Szeged, Hungary
- Received a scholarship by the university to attend the ECMI Modelling Week to solve the problem at hand as part of an international team

</> Other projects include a Fruit Ripeness Classifier to help reduce food waste, a Video segmentation (clustering) pipeline of Giro d'Italia streaming data etc. that can be seen on my website

Hard Skills

</> Fluent in programming languages such as Python, R, C, C++. Experienced using Python libraries such as PyTorch, SciKit-Learn, NumPy, Pandas, OpenCV

</> Experienced in database management using SQL

- Experienced in Microsoft Office, LaTeX

Accomplishments and awards

- Studied oboe at Cons. Música Calouste Gulbenkian for nine years completing level 5
- Composed and performed, solo and in an orchestra, in multiple theatres in Portugal: Casa da Música do Porto, Theatro Circo, Altice Fórum Braga etc.
- Achieved perfect score in the national exams of 'Maths' and 'Physics and Chemistry' finishing high school with an average of 19.5/20
- Received merit certificates in Cons. de Música Calouste Gulbenkian and Escola Secundária Carlos Amarante.