# Luís Leitão

MSC STUDENT IN ENGINEERING PHYSICS

#### Contact

+351 939933931

✓ luish.leitao@gmail.com

luishleitao.com

in linkedin.com/in/luishleitao

github.com/luishleitao

**Q** Lisbon, Portugal

#### About me

I'm passionate about applying mathematics, physics and machine learning to uncover patterns and model social phenomena: from financial markets and economic behaviour to language and cul-I'm drawn to tural evolution. problems whose solutions can make everyday life a little easier. Want to know more about me? Visit my website!

#### Technical skills

Programming: Python, SQL, LaTeX, Matlab

Tools: Git, VS Code, Linux,

macOS, Windows

## Languages

Portuguese - C2 (native) English - C1

French - A2 (learning)

#### Interests

Reading, running, cycling, swimming, spearfishing, investing, music, surfing

#### Education

# Master's degree in Engineering Physics

Sep 2023 – Present

FCUL - University of Lisbon

- Currently pursuing the second year of the Master's degree with coursework spanning optics, nuclear physics, control theory, and complex systems (with a strong focus on econophysics).
- Participation in the hands-on course at the JSI TRIGA research nuclear reactor, in Ljubljana, covering techniques for neutron detection.

#### Erasmus+ Exchange Student

Sep 2024 – Jan 2025

Sorbonne Université, Paris

• Integrated within the Master's in Physics, specializing in machine learning.

## Bachelor's degree in Engineering Physics

Sep 2019 - Aug 2022

FCT - NOVA

- Developed strong foundations in mathematics, classical and quantum physics, electronics, and programming.
- Engaged in the student association, where I organized multiple workshops, lectures and interviews. As Treasurer, managed the budget and bank account, and prepared detailed financial reports.

### Experience

#### Research Fellow

Mar 2023 - Present

NUC-RIA, LIP

- Supported by an 18-month FCT research grant, this work involved the calculation of atomic parameters for heavy ions and astrophysical simulations for kilonovae nucleosynthesis.
- Supervised two bachelor's students during a summer internship focused on developing a database and a corresponding website for data access.
- Publication on Physical Review A: R. F. Silva, A. Flörs, L. Leitão, "Systematic Bayesian Optimization for Atomic Structure Calculations of Heavy Elements"
- Presented 1 talk and 3 posters at conferences including: IBER2023, Russbach 2024, FÍSICA2024 and NIC2025.
- Python | FAC (relativistic atomic structure code) | SQL | HTML

#### Math and physics tutor

Jan 2020 - Sep 2024

• Math and physics tutor for high school students, balancing 4 to 9 hours per week alongside academic and research commitments.

#### Intern

Jan 2022 - Mar 2022

Instituto de Astrofísica e Ciências do Espaço

• Research on a sample of high redshift galaxies spectra taken from the MOS-DEF survey, using Python and the FADO tool with the goal of predicting the contribution of nebulae to the global makeup of the galaxies.

# Volunteering

#### School Assitant

Sep 2022 - Oct 2022

Escola Humberto Braima Sambu, Guiné Bissau

• Supported education and operations during school holidays.

Scout CNE

Sep 2011 – Aug 2022

• Member for 11 years, leading teams and participating in various volunteer initiatives.