AFONSO PINTO CARDOSO RAFAEL

afonsorafael@sapo.pt / website

INTERESTS

- Compiler development and functional languages.
- Type theory and PLT.
- Quantum Computing.

EDUCATION

Masters in Computer Science, Faculty of Sciences of the University of Lisbon

- Relevant Coursework: Compilation Techniques, Domain Specific Languages, Quantum Computing.

B.S. in Geospatial Engineering, Faculty of Sciences of the University of Lisbon

2016 - 2020

Drumming, International Drum Academy

2016 - 2020

High School, Colégio de São Tomas

2004 - 2016

SKILLS

Programming languages

Technical Skills

Soft Skills Music Skills Haskell, Typescript, Python, C, Lisp

Compiler design and implementation, Web Development, Data processing Enjoy speaking with people, Enjoy presentations and public speaking

Drummer (5 years), Guitarist (6 years), Amateur choir

EXPERIENCE

IMDEA Software

Intern Researcher

September 2022 - March 2023

Madrid. SP

- Helped development of the relational refinement type system (Liquid Haskell).
- Helped writing the paper on relational liquid types.

Research Fellowship

January 2022 - July 2022

Faculty of Sciences of the university of Lisbon

Lisbon, PT

- Develop a compiler for the Freest language, targeting JavaScript (Built with Haskell).
- Build a test suite for the compiler.

Summer with science (Research Fellowship)

August 2021

Faculty of Sciences of the university of Lisbon

Lisbon, PT

- Building programs with Freest that later got into the testing suite.
- Finding bugs and reporting them during development.

Software Developer (Intern)

2019 - 2020

Think Future

Lisbon, PT

• Helped Build a system to manage aerial information for control of drone flight.

Data Science (Intern)

August 2019 - September 2019

ITC Faculty of Geo-information Science and Earth Observation

Ensched, NL

- Helped re-write code with parallelisation in mind, making use of the Dask python library.
- Helped Lecture practical classes on the Institute.
- Helped process geographical information for decision making.

MUSIC

 $\begin{array}{c} \textbf{Drummer} \\ \textbf{AZMA} \\ \end{array} \hspace{2cm} 2019 \text{ - } 2023 \\ \textbf{\textit{Lisbon}, PT} \\ \end{array}$

- Play drums and help compose the songs.
- Help manage the social accounts and project contacts.
- Participated on the recording of songs like: Akadom

Guitarist 2022 - 2023 Split Objects Lisbon, PT

- Support guitarist for the band.
- Help with gigs.

 Drummer
 2017 - 2019

 PodPop
 Lisbon, PT

- Played drums and helped compose music.
- Helped record the video clips.
- Participated on the recording of songs like: Is It Love Or Sacrifice, BlackOut, Spoon Of The Gods.

Guitarist
Why Knot
Lisbon, PT

- Played guitar and helped compose music.
- Participated on the recording of songs like: Nothing Concrete.

EXTRA-CURRICULAR ACTIVITIES

Discord Admin/Event Manager

2020 - Present Lisbon, PT

DevPT

- Participated in the devPT talks as Manager and Speaker.
- Moderate and Help make decisions on the Discord platform.
- Help manage social media.

HONORS & AWARDS

• Best Poster - 1st, LASIGE Workshop'22.

PRESENTATION

• Eu uso Emacs, roast me. - DevPT - First Meetup.