## AFONSO PINTO CARDOSO RAFAEL

afonsorafael@sapo.pt / website

#### **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

#### **EXPERIENCE**

Intern Researcher
IMDEA Software

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.

#### SKILLS

Programming languages

Haskell, Typescript, Python, C, Lisp

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

#### HONORS & AWARDS

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

## **PRESENTATIONS**

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

## **EXTRA-CURRICULAR ACTIVITIES**

# Discord Admin/Event Manager DevPT

2020 - Present Lisbon, PT

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

## **MUSIC**

 Drummer
 2019 - 2023

 AZMA
 Lisbon, PT

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

- 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.