

# Rodrigo Mesquita

Email     r.mesquita@campus.fct.unl.pt  
Phone    +351 937 771 064  
Site      alt-romes.github.io

## EDUCATION

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### MSc. Computer Science and Engineering

NOVA School of Science and Technology

Current average grade: 15.90

2018 - Today  
Lisboa, Portugal

## RESEARCH

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### Synthesis Of Linear Functional Programs

NOVA School of Science and Technology

I had the opportunity to be advised by Prof. Dr. Bernardo Toninho in writing this work, which was given the highest grade

Mar. 2021 - Jul. 2021  
Lisboa, Portugal

## WORK EXPERIENCE

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### Glasgow Haskell Compiler

Active contributor

Feb. 2022 - Today  
Online, GHC

- Making the Haskell AST GHC-independent following *Trees that Grow* by Simon P.J. and Shayan Najd.
- Running experiments on the internal representation of *fast strings*.

### Universität Koblenz

Research assistant, guest lecturer

Jun. 2022 - Aug. 2022  
Koblenz, Germany

- Writing two modules to extend the course *Introduction to Functional Programming*.
- Giving a guest lecture on one of the added modules.

### Connektor

Software developer (half-time)

Feb. 2022 - Mar. 2022  
Lisboa, Portugal

- Development of app to manage PATS (*pedidos de assistência técnica*)

### Cult of Bits

Software developer (internship)

Nov. 2022 - Feb. 2022  
Lisboa, Portugal

- Created a dashboards system for *Efficio Consulting* using TailwindCSS and Vue.js
- Wrote a Haskell interface to the CoB platform

### Biofix

Software developer (half-time)

Sep. 2020 - May 2021  
Lisboa, Portugal

- Development of a web-app using Vue.js.
- Automated business-specific features using the data-processing pipeline in Groovy.

## RELEVANT PROJECTS

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**C compiler** which compiles C to LLVM; written in C

2022

**Operating system** with a minimal libk, flat memory model, and paging (WIP)

2021

**Programmer calculator** – a TUI calculator to work very close to the bits; written in C

2021

**Gameboy emulator** which runs Tetris and passes the initial standard CPU and MBC1 support tests; written in C

2021

**CHIP-8 emulator** that runs on a gameboy, written directly in gameboy assembly (RGBASM)

2021

## RELEVANT EVENTS

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**Sessão de boas-vindas** – Sessão para alunos de 1º ano aos quais apresentei a vertente de investigação de APDC

2021

**Feira Virtual @ DI** – Sessão de apresentação e esclarecimento a potenciais alunos do curso de Informática

2021

## TECHNICAL SKILLS

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FLUENT IN

CONVERSATIONAL IN

KNOW SOME

Haskell, C, Vim, Git, Java, HTML/CSS/JS, Portuguese, English

Rust, Go, Assembly, Python, Bash, German, Spanish

Swift, LLVM, L<sup>A</sup>T<sub>E</sub>X, Erlang, Scala, Japanese, Russian