## **Pedro Mendes**

#### Systems Engineer

#### Curriculum Vitae

**♀**: Braga, Portugal | **►**: pedro.mendes.26@gmail.com | **♀**: mendess | **in**: mendes2526

## **Skills**

**Programming:** Rust, C, eBPF, C++, Kotlin, Bash, Typescript,

Python, Java, C#, Javascript, Ruby, Haskell, Elixir.

**Spoken:** Portuguese Native, English C2.

Markup LATEX, Markdown, Html, CSS.

**Databases:** SQL (mysql, postgres), NO-SQL (mongodb, neo4j). **Tools:** Advanced Git knowledge, Linux, GNU core utils, Docker.

# **Experience**

| 2019–∞      | Open source contributions  |                                 |                            |                       |            |  |
|-------------|--|---------------------------------|----------------------------|-----------------------|------------|--|
|             | rust-lang/rust   | bread-graphics/breadx           | serenity-rs/serenity       | bread-graphics/breadx |            |  |
| 2023-Now    | Systems Engine   | eer @ Cloudflare                |                            |                       | Cloudflare |  |
|             | At Cloudflare I work in the emergent technologies team, making use of eBPF, WASM and other         |                                 |                            |                       |            |  |
|             | new technologies to develop prototypes for new Cloudflare projects.                                |                                 |                            |                       |            |  |
| 2021-2022   | Backend Engineer, Library Developer @ Speechify  |                                 |                            |                       |            |  |
|             | At Speechify I integrated a team dedicated to rewriting the core of the experiences in the Kotlin  |                                 |                            |                       |            |  |
|             | Multiplatform stack, which transpiles to ObjectiveC and JS, as well as compiling to jvm bytecode   |                                 |                            |                       |            |  |
|             | for android, which meant understanding how the different memory models and async runtimes of       |                                 |                            |                       |            |  |
|             | these 3 ecosystem  | ms interact.                    |                            |                       |            |  |
| 2021-2021   | Full stack and IoT engineer @ Emitu  |                                 |                            |                       | Emitu      |  |
| (10 months) | Emitu offers enterprise-grade Internet of Things (IoT) solutions combining smart sensors and soft- |                                 |                            |                       |            |  |
|             | ware to gain real  | l-time visibility over asset op | erations, usage, and statu | s.                    |            |  |

# **Highlighted Projects**

| Rust     | Scryfall  | Crates.io   |  |
|----------|---|-------------|--|
|          | A type safe and complete wrapper around a REST API for fetching and searching for cards from      |             |  |
|          | the Magic: The Gathering <sup>TM</sup> card game.   |             |  |
| C        | Parallel and Distributed Computing (University project)   |             |  |
|          | Successfully used openMP and MPI to develop a blazingly fast, multiprocess system to calculate    | Grade 19/20 |  |
|          | product recommendations in C.   |             |  |
| C++ & Go | Internet of Sensors and Actuators (University project)  | Repository  |  |
|          | Assembled an arduino with various sensors and one with various leds and established high through- | Grade 16/20 |  |
|          | put, low latency and reliable connection between them over the internet                           |             |  |
| C++      | Generic Graphics Engine (University project)  | Repository  |  |
|          | A generic graphics engine, capable of efficiently rendering any kind of scene defined in an XML   | Grade 20/20 |  |
|          | configuration file  |             |  |
| Markdown | ResumosMIEI   | Repository  |  |
|          | A collection of notes written in Portuguese to help students study the base concepts of computer  |             |  |

### **Education**

| 2019 — ∞ | Masters in Info | rmation Systems ar | ıd Computer E | Engineering | Instituto Superior Técnico |
|----------|-----------------|--------------------|---------------|-------------|----------------------------|
|          |                 |                    |               |             |                            |

Forensics Cyber-Security: 16/20 Average: 15/20

Network and Computer Security: 15/20

science, lectured at University of Minho.

Advanced Programming: 18/20

2015 — 2019 Bachelors in Science of Computer Engineering University of Minho

Informatics Labs (1, 2, 3 and 4) Average: 19/20 Average: 15/20

Algorithms and Complexity: 16/20

Program Calculus: 20/20

Imperative and OO programming: 18/20 and 19/20 (respectively)

Compilers: 17/20