# Eric H. H. Lopes

# Software Engineer

Dourados - MS, Brazil erichhlopes@gmail.com Portfolio: erichhl.dev

# **GAME PROJECTS**

I've been making games since I learned to program. I have experience in a couple of game engines, including Unity with C#, Godot with GDScript, and Love2D and Solar2D with Lua. I showcase my best work in my portfolio, but here are the ones I think are the most noteworthy:

## Dye the Die

A puzzle game where you rotate a die to paint the pips, so it ends up in a valid state. I made it with a friend on a weekend for the GMTKJam 2022 with Godot, then later ported to Unity by me.

Playable web version(Godot): <a href="https://rsensato.itch.io/dye-the-die">https://rsensato.itch.io/dye-the-die</a>
Unity source code: <a href="https://github.com/EricHHL/Dye-the-die">https://github.com/EricHHL/Dye-the-die</a>

### **Omniblocks**

A twist on the Tetris formula where pieces fall from all four sides of the screen on a fixed central block. It was made entirely by me on the Solar2D engine with Lua. <a href="https://play.google.com/store/apps/details?id=dev.suaveware.omniblocks">https://play.google.com/store/apps/details?id=dev.suaveware.omniblocks</a>

#### Coisa

Coisa is an Entity-Component System for the LÖVE 2D game framework. I liked the freedom a low-level game framework gave me but missed the prototyping speed of something more complete like Unity. So Coisa is what I developed to help with that, complete with full documentation.

Source code: https://github.com/EricHHL/Coisa

#### **EXPERIENCE**

Pathable, Remote - Full-stack Developer

FEB 2020 - CURRENT

My first experience with remote work and for an international company in a big team. Here I use the MeteorJS framework with React in the front end. I work on core parts of the system, mainly on security and performance-related tasks. It's a challenging job that often requires creative solutions for complex tasks and encourages out-of-the-box thinking, which I greatly enjoy. Some highlights of my experience:

- Collaborated with a security firm doing penetration testing, understanding and fixing the issues that came up
- Did general degraded performance investigations with CPU profiles and other analytics tools to identify and fix problems, both on client- and server-side
- Developed an end-to-end performance analysis tool to monitor performance on developer's branches to prevent issues before they are released
- Developed a specialized tool capable of load-testing the servers with tens of thousands of users at a very low cost compared to what's available on the market

# **Gênesis Tecnologia, Dourados** - Mobile Developer

FEB 2019 - FEB 2020

At Gênesis, I was responsible for developing three <u>companion apps</u> with React Native for the company's existing systems, from requirement gathering to publishing in the app stores. This required collaboration with all the teams behind the systems and good self-organization to meet tight deadlines while producing a good quality app. Here I made apps that are used today by health professionals and teachers of the public sector, so I liked to go above and beyond to improve their experience even though that wasn't an explicit requirement, and I'm proud of that.

# **COIN UFGD, Dourados** - Intern, part-time

JAN 2017 - JAN 2019

In college, I proactively developed an app for the university with a friend, <u>UFGDMob</u>, with basic info for students scrapped from external sources like news, transport timetables, and daily restaurant menu. Making the app landed me an internship in the IT department, where I mostly maintained the app, added features, and integrated it with the university's system.

#### **EDUCATION**

**Federal University of Grande Dourados(UFGD), Dourados** - Computer Engineering, incomplete

2016 - 2020

Being self-taught, the classes had a big overlap with the knowledge I already had. I stayed for the networking and extra-curricular activities, which gave me valuable experience and opportunities. I dropped it at the start of the COVID pandemic in 2020 when classes went virtual, and I didn't see a reason to continue other than a piece of paper.