Eric H. H. Lopes

Full-stack Developer

Dourados - MS, Brazil erichhlopes@gmail.com

EXPERIENCE

COIN UFGD, Dourados - Intern, part-time

JAN 2017 - JAN 2019

After developing an app for the university with a friend, <u>UFGDMob</u>, I was offered an internship in the software development team in the university's IT department. Over there I was responsible for maintaining the app and developing new features for it, working with Java both on the backend and on the client.

Gênesis Tecnologia, Dourados - Mobile Developer

FEB 2019 - FEB 2020

This company develops governmental management systems for cities in my region: hospitals, schools, social services, and the like. They were looking to complement their systems with mobile apps, and I was the sole responsible for the endeavor. Using React Native(Typescript) for mobile and Laravel(PHP) in the backend API, I made numerous apps while there, 3 of which are in production today and others that were still in development. What I most liked while working there was that I was making software for a good cause, like the teacher module app that would be used by hundreds of teachers of public schools in my area. I made sure to take extra care of the user experience as a form of gratitude for the work they do.

Pathable, Remote - Full-stack Developer

FEB 2020 - CURRENT

Where I currently work, my first experience with remote work and for an international company in a big team. Pathable is a virtual events platform that uses the Meteor JS framework with React in the front-end. Here 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 difficult tasks and encourages out-of-the-box thinking, which I very much enjoy. Some highlights of my experience:

 Worked 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 in order 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

EDUCATION

IFMS(Federal Institute), Ponta Porã - Information Technology

2012 - 2016

It may be uncommon to include your high school in your CV, but I feel this one is necessary. The Federal Institutes in Brazil offers high school in a university-like format, where in addition to the regular classes you also choose a course to take at the same time. I chose the IT course, and to this day I regard it as the best decision I made in my life since it introduced me to programming, which turned out to be my passion.

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

2016 - 2020

It seemed like the obvious choice, but turns out the classes had a big overlap with the knowledge I already had. I stayed for the networking potential and extra-curricular activities, which gave me valuable experience and opened many doors for opportunities. I ended up dropping 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.

SIDE PROJECTS

Throughout the years I made numerous side-projects, mainly surrounding game development since it's an area of interest to me. Here are the ones I think are the most noteworthy:

Treco

<u>Treco</u> is an Entity-Component System for the LÖVE 2D game framework. Coming from Unity, a Game Engine that is way more feature-complete, I liked the freedom that a low-level game framework gave me, but missed the base structure necessary to quickly prototype game ideas. Treco was my take on replicating Unity's ECS.

Omniblocks

The first game I finished to a state I felt ready to publish, it's like Tetris but the pieces arrive from all 4 sides of the screen onto a center fixed piece, with the objective being completing layers instead of lines. This was also when I dipped my toes into the game development industry by negotiating with a publisher, but it didn't work out in the end. It is not available anywhere, but here's a gameplay video.