# **Manuel Sousa**

Brussels, Belgium | linkedin.com/in/mlrcbsousa/ | +32 473-123-816 | mlrcbsousa@gmail.com

### WORK EXPERIENCE

Keyrock Brussels, BE

Senior Software Engineer

January 2024 – Present

- Develop customizable Options trading systems with dynamic widgets and intuitive UI, enable traders to personalize their layouts and consume calculations data and market data with split second precision and reactivity.
- Integrate 10+ backend APIs, ensuring high performance and seamless data display. Successfully fix several performance
  issues derived from large amounts of data being polled every half a second where every excess in memory and network use
  had to be scrutinized.
- Document every aspect of the development process, creating 20+ guides and technical documents that aid in onboarding and knowledge transfer across global teams.
- Conduct workshops on Options trading theory, gRPC usage, and widget library implementations, enhancing team expertise and fostering a culture of continuous learning.
- Collaborate asynchronously with team members across Europe, Americas, and Australia, maintaining high standards of communication through detailed ticketing comments and code reviews.

Software Engineer

October 2022 – December 2023

- Spearheaded and executed the successful implementation of the Post Trade Settlement feature, which facilitated a credit line enhancement of 3 million dollars.
- Achieved 80% test coverage on main applications by implementing rigorous testing practices, ensuring high reliability and stability in production environments.
- Managed project workflows using ticketing tools, aligning development tasks with trader specifications and QA feedback to deliver precise and efficient solutions.
- Enhanced code quality through tight code review systems and CI/CD pipelines, ensuring all changes are reversible, changelogged, and versioned for seamless deployments.

Metarina Remote

Senior Software Engineer

July 2023 - April 2024

- Implemented Billing system extension, separating charges from invoicing, which facilitated fee structure and improved flexibility, increasing revenue streams.
- Developed complex features for boaters searching for marinas, and marina admins managing their marina, utilizing Tailwind CSS, Stimulus JS, Hotwire and Ruby on Rails.

Coloc Housing Brussels, BE

Software Engineer

January 2020 - April 2020

- Integrated customer support systems and considered API integrations for signing rental contracts, improving user experience and operational efficiency.
- Collaborated closely with cross-functional teams to align product offerings with market needs, contributing to company
  growth.

Above (PaxFamilia) Brussels, BE

VP Engineering

April 2021 – September 2022

- Led workshops and training sessions to upskill team members, fostering a collaborative and high-performing engineering culture. Traveled overseas to onboard 2 new joiners. Created an internal documentation database with 20+ articles and guides.
- Created 100+ attractive complex UI features and respective backend implementations, e.g. a questionnaire builder that results in a report with specific widgets.
- Improved internal workflows, outlining product specification standards, code quality, reporting and feedback. Improved CICD, made it clear to stakeholders, increasing the amount of deploys and boosting trust and alignment.

Lead Software Engineer

January 2020 - March 2021

- Worked on product integrations with SaaS providers, XS2A and PSD2 integrations using PaxFamilia's AISP license, connecting 10+ banks to the application.
- Lead and managed a developer team of 4+, from onboarding and training, task management, delegation, and code review. Streamlined development processes by introducing standardized coding practices and tools

Software Engineer

January 2019 – December 2019

- Developed new data upload API for a major bank client, boosting app uploads from 1 to 500+ HNWI families weekly, utilizing TDD, Swagger docs and JSON Schema API conventions.
- Created a testing suite using self-developed tools, increasing app test coverage from 0% to over 40% on a 30k+ line codebase. This resulted in reduction of production bugs by catching them earlier in the deployment pipeline.

• Collaborated with cross-functional teams, including external bank team members, to gather requirements and deliver solutions.

#### **EDUCATION**

Brussels, BE

Computer Science

Ongoing

- Internship done at Keyrock while already working there full time. Turned the Complex Layouts with customizable Widgets implementation into an internship project to present after 6 months on a short YouTube video essay.
- Engage in peer-to-peer learning and project-based education, enhancing practical skills and collaborative abilities.

42 Lisbon, PT

Computer Science

Completed: February 2023

- Part of the first group to finish the Common Core curriculum at the 42 Lisboa school, this consisted of various challenging projects developed without external libraries, demonstrating problem-solving skills and perseverance.
- Completed while already working in Belgium full-time non-remote, had to use any free time to complete projects and holidays to travel to Lisbon to evaluate other students and turn in projects.

Le Wagon Lisbon, PT

Web Development Bootcamp

Completed: December 2018

• Collaborated with a team to deliver a fully functional application within tight deadlines. Ambitious final project connecting Trello Sprint boards to an app producing KPI metrics for agile teams.

#### PROJECT EXPERIENCE

Webserv Lisbon, PT

42 project in C++

September 2022

- Group project with 2 other students, developed a HTTP 1.1 web server from scratch with standard library native functions, included key features like request parsing, response generation, and protocol standards compliance, enhancing understanding of server architecture.
- Achieved a performance benchmark comparable to Nginx for basic static content delivery and implemented Common Gateway Interface functionality tested on PHP requests.

Cub3d Lisbon, PT

42 project in C

*May 2022* 

• Implemented a 3D graphics engine using 2D ray casting techniques, taking the first steps to recreate the Wolfenstein game, showcasing proficiency in low-level graphics programming.

Minishell Lisbon, PT

42 project in C

March 2022

 Developed a shell program with command execution capabilities, environment variable handling, input/output redirection, and pipeline execution.

## LEADERSHIP EXPERIENCE

## Vipassana Meditation Center Chef

Dziadowice, PL

August 2018

- Led a team of serving volunteers to prepare and serve meals for 180 meditators, ensuring high-quality food and timely service
- Trained non-professional cooks, optimizing kitchen operations without overexerting authority, fostering a harmonious working environment.
- Received high praise from staff and meditators for food quality, and was invited to stay on as a resident chef.

Pesqueiro 25 Lisbon, PT

Sous Chef

March 2018 - June 2018

- Managed evening dinner rush as the line cook, addressing the restaurant's immediate need for experienced staff.
- Created and set up systems for desserts, ensuring they were prepared and ready to serve before dinner, improving service efficiency.
- Handled diverse team dynamics and backgrounds, effectively leading without prior time to build rapport, showcasing adaptability and leadership.

## **SKILLS & INTERESTS**

**Skills:** TypeScript, Ruby, C, C++, Python, Rust | Vue 3, VitePress, Ruby on Rails | GraphQL, REST, gRPC | PostgreSQL, Redis, CouchDB | Vitest, RSpec, Jest, Playwright, Cypress | Vite, Docker, Concourse, AWS | HTML, CSS, JavaScript

Languages: English (Native), French (Fluent), Portuguese (Fluent)

Interests: Cooking, Foodie, Traveled to 30+ countries, Meditation, Yoga, Swimming, Cycling, Powerlifting