João Pedro Baptista *Backend Software Engineer*

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EMPLOYMENT HISTORY

Uphold, *Backend Software Engineer - Junior* 08/2025 – Present | Braga, Portugal

Core Technologies: Go, Node.js, JavaScript, Jira

- Maintaining and developing an internal application in **Go** responsible for automating and orchestrating the movement of assets across exchanges, wallets, and custodians such as Binance, OKX, Fireblocks, KuCoin, and Coinbase.
- Collaborating with the FinOps team and other engineering teams to coordinate tasks, resolve incidents, and ensure the operational reliability of systems.
- Using tools such as **K9s** for service monitoring, **Datadog** for metrics and log analysis, and **Temporal** for observing and maintaining workflows.
- Contributing to related projects, supporting continuous improvements and new integrations within Uphold's internal ecosystem.

Checkmarx, *Backend Software Engineer - Intern* 06/2024 – 05/2025 | Braga, Portugal

Core Technologies: .NET Core, C#, Go, JavaScript, Jira

- Engineered **grammars** and **parsers** in **.NET Core (C#)** to construct Abstract Syntax Trees (**ASTs**) for code flow analysis, identifying vulnerabilities such as SQL Injection (CWE-89), Reflected and Stored Cross-Site Scripting (XSS) (CWE-79), Buffer Overflows (CWE-120), and Code Injection (CWE-94).
- Developed APIs using **Go** and **JavaScript** within a **microservices** architecture, enhancing security analysis capabilities.
- Used tools such as **Jira** for agile project management, **Azure DevOps** and **GitHub** for source code management and collaborative development and **Confluence** for documentation.
- Developed a Roslyn-based static analysis tool in C# to enforce coding best practices, implementing approximately 20 rules (e.g., removal of unused variables, enforcement of explicit type declarations).

EDUCATION

Bachelor's in Software Engineering, *University of Minho* 09/2021 – 06/2024 | Braga, Portugal

Core Technologies:

Web Development: ASP.NET Core, Express.js, Vue.js

Programming Languages: C#, C++, Java, Python, C, Haskell

Database Management: SQL

SKILLS

.NET Core | C# | Go | Node.js | SQL | MongoDB | Jira | Azure DevOps

LANGUAGES

Portuguese — Fluent

English — B2 Certificate (British Institute of Braga)

*Below, you'll find three selected projects that showcase my skills and experience, developed in both personal and academic contexts. For a more comprehensive portfolio and access to all my projects, including source code, please visit my online **Portfolio** or my **GitHub** profile (links are in the CV header).*

PROJECTS

Instant Menu - barDoMar.instantmenu.pt, *Personal* 05/2025 – present

Core Technologies: Next.js, React, TypeScript, MongoDB Atlas, Clourflare R2

Overview: After completing my internship at Checkmarx, I channeled my drive for continuous learning into developing InstantMenu, a dynamic and multilingual digital menu application designed for restaurants seeking a modern, scalable solution for their digital presence.

Data Management: InstantMenu leverages MongoDB Atlas for flexible, NoSQL menu data storage with intelligent caching strategies using Next.js 15's Data Cache (1-hour TTL with tag-based invalidation). Images and logos are stored in Cloudflare R2 for cost-effective, global distribution with zero egress fees and S3-compatible APIs. This architecture ensures fast load times while maintaining the ability to instantly update content across all locations.

Frontend: Engineered with Next.js 15's App Router, React 18, and TypeScript, the frontend delivers a responsive and visually appealing digital menu experience. Key features include full multilingual support with locale-based routing, light/dark theme toggling with smooth transitions, real-time search functionality with highlighted results, collapsible category sections with animations, and custom subdomain support (e.g., restaurant-name.instantmenu.pt). The modular CSS architecture and responsive design ensure seamless browsing across all devices, from mobile to desktop.

Servindustria Web App - servindustria.pt, *Personal*

Core Technologies: ASP.NET Core, C#, Entity Framework Core, SQL Server

Overview: Developed a comprehensive full-stack company website and Content Management System for Servindustria, managing company information, services, and contacts.

Backend: Engineered with **ASP.NET Core MVC** and **C#**, it provides a robust backend solution handling all server-side logic, routing, and business operations, supporting the dynamic content of the website.

Database: Integrated with **SQL Server** using **Entity Framework Core** for efficient data persistence and management. The database stores critical company information, service details, and contact data, ensuring data integrity and accessibility.

Authentication & Authorization: Secured administrative access through a robust authentication system, allowing authorized personnel to manage website content and configurations securely.

Front-end Integration: Utilized **Razor Views** for server-side rendering, generating dynamic HTML pages that provide an intuitive and responsive user experience for visitors, while also serving as an administrative interface for content management.

University Courses Platform Manager, *Academic*

Core Technologies: Node.js, Express.js, REST, MongoDB

Overview: Developed a full-stack online course management system during the Web Engineering course at the University of Minho.

Backend: Built with **Node.js** and **Express** for **RESTful API** handling; implemented robust routing for **CRUD** operations across resources like courses, users, enrollments, and permissions.

Database: Integrated with **MongoDB** to store and query structured data effectively.

Authentication & Authorization: Secured platform access through mechanisms like **JWT**-based authentication and role-based permissions, safeguarding endpoints against unauthorized use.

Front-end Integration: Designed to interface cleanly with a front-end (**JavaScript**/**HTML**/**CSS**-based), enabling administrators, instructors, and students to interact via REST API calls.