

Software engineer experienced in developing innovative web and AI-driven solutions, specializing in Ruby on Rails and modern AI frameworks. Proven expertise in leveraging AI to automate complex workflows, improve content evaluation accuracy, and enhance user experiences. With a commitment to continuous learning and a proven track record of delivering results, I am eager to contribute effectively to Ruby on Rails projects and thrive in dynamic team environments.

Work Experience

Software Engineer	HYP Coimbra, Portugal	Aug 2023 - Present
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- Developed and maintained a web extension for TopCashback, and contributed to the logic and backend using Ruby on Rails.
  - Developed an AI-powered promotional content classification and rating system.
  - Integrated a Retrieval-Augmented Generation (RAG) approach with vector embeddings to provide contextual data to AI models, improving accuracy.
  - Designed logic to pre-filter promotions based on similarity and consensus, significantly reducing API costs and optimizing performance.
- AI Data Completion
  - Implemented AI-driven recommendations to intelligently complete user profile fields (e.g., languages, universities, and dates), improving data quality.
  - Built a conversational, chat-based interface utilizing AI function-calling to facilitate user-friendly profile updates.
- Web Development & Integration
  - Developed and maintained a JavaScript web extension for TopCashback, managing backend operations via Ruby on Rails.
  - Designed and delivered RESTful APIs to integrate SprintCV services with external platforms.
- Project and Client Management
  - Actively participated in requirements gathering, client communication, and technical decision-making.
  - Managed project timelines, prioritized tasks, and delivered timely software solutions aligned with business objectives.

Software Engineer Intern	HYP Coimbra, Portugal	Sep 2022 - July 2023
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- Conceptualized and developed a comprehensive RESTful API Channel Manager integrated with a Property Management System (PMS) for OTA synchronization (Booking.com, Expedia), significantly enhancing operational efficiency.
- Developed a comprehensive RESTful API Channel Manager

Education and Certifications

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| M.Sc. Software Engineering, University of Coimbra.   | 2021–2023 |
| B.Sc. Informatic Engineering, University of Coimbra. | 2017–2021 |

## Technologies and Languages

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- **Languages and Frameworks:** Ruby on Rails, Javascript, Python
- **AI & Data:** LLMs and APIs, Retrieval-Augmented Generation (RAG), Contextual Embeddings, Vector Databases and Function Calling.
- **Development Tools:** Git/GitHub/GitLab,, Docker, Rspec, RESTful APIs

## Projects

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- **Channel Manager for Property Management System (Master's Thesis)** - Engineered a comprehensive RESTful API integrating hotel management systems with OTAs like Booking.com and Expedia. Facilitated seamless synchronization, significantly reducing operational overhead. Documented extensively in a 200-page thesis, encompassing requirements analysis, architecture design, and implementation.
- **AI-based Content Classification (TopCashback)** - Leveraged LLMs and Retrieval-Augmented Generation (RAG) methodology for accurate promotional content assessment and filtering. Optimized AI interaction via smart pre-processing, drastically improving efficiency.
- **Smart Profile Completion** - Implemented AI-assisted data enrichment, enhancing user experience and profile accuracy through conversational AI tools.

## Interests

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- Artificial Intelligence and Emerging Technologies
- Aviation and Travel
- Personal Development & Continuous Learning