

Guilherme Serrão

Full Stack & AI Automation Engineer

guisserrao@gmail.com | +351 963 923 280 | Leiria, Portugal

[linkedin.com/in/guilherme-serrao](https://www.linkedin.com/in/guilherme-serrao) | github.com/GuilhermeSerrao

Technical Skills

Languages: Python, TypeScript, JavaScript, C#, C++

Web: React, Next.js, Tailwind CSS, Node.js, FastAPI, REST APIs

AI & Automation: Autonomous Agents, LLM Integration (LangChain), Web Scraping (Playwright, Selenium), Data Pipelines

Data & Infra: PostgreSQL, Docker, Linux Debian, scheduled workers

Game Engines: Unity, Unreal Engine, Source 2 (S&box)

Professional Experience

Full Stack & AI Automation Developer — Witty AI

2025 – Present

- Built autonomous prospecting agents that research, qualify and enrich B2B sales leads end to end, replacing manual sourcing with a scheduled pipeline
- Designed schema-validated ingestion pipelines with retry and backoff, normalizing inconsistent scraped data for downstream tools
- Engineered a headless-browser scraping layer tolerant to layout drift, isolating failures per source (Playwright, Python)
- Automated workflow orchestration and API integration across internal systems (FastAPI, PostgreSQL)

Full Stack Developer — Betshot

2025 – 2026

- Developed the studio's production website end to end, from content model to responsive build (Next.js, TypeScript)
- Built interactive search-and-find brand campaigns for festival and FMCG clients — Kappa × Les Ardentes, Lipton Ice Tea, Click&Boat — hosted and wired to prize redemption
- Designed a generic per-campaign player API on self-hosted Supabase where each game gets its own table automatically, removing per-game setup

Diversified Technical Projects — Playads.io

2022 – 2025

- Shipped independent games and playable prototypes, designing gameplay mechanics, state machines and simulation loops in C# (Unity)
- Delivered internal tools and scripts that collapsed spreadsheet-based operational flows into a single typed interface (React, Next.js, Node.js)
- Integrated AI into production systems for analysis, collection and organization of data

Projects

edge-lab — Trading Edge Discovery 2026

Backtests strategies over a stock universe across three timeframes, validates them walk-forward with Deflated Sharpe, and serves survivors through a dashboard and API for trading bots (Python, Alpaca, Pandas)

Engine Logic on Source 2 (S&box) Ongoing

Engine-level programming: custom entity and component logic in C#, real-time state handling and networked interactive systems

Education

BSc in Games & Multimedia

2018 – 2022

ESTG — Leiria

Professional Secondary, IT Technology

2013 – 2016

Escola Secundária Pinhal do Rei