# **SANTIAGO BARRA**

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#### **EXPERIENCE**

### **Freelance Game Developer**

Feb 2025 — Present

- Delivered 4 client projects (mobile puzzle games & Al-driven simulations)
- Designed gameplay mechanics, procedural systems, and modular UI/UX features
- Integrated Ads, Analytics, and Multiplayer SDKs; optimized performance across devices
- · Worked closely with clients & artists, shipping builds under tight deadlines

Technologies: Unity (C#), Unreal Engine (C++), Multiplayer APIs, Git, Jira

#### **EDUCATION**

# **IMAGE Campus, Video Game Development Technician**

2022 - 2024

**Universidad Austral, Computer Science (B.Sc.)** 

2019 - 2021

#### **CURRENT PROJECTS**

## Mystic Merchant – Unity, C#

<u>ltch.io</u>

- Al-driven NPC behavior with NavMesh & emotional response system
- Real-time pricing simulation with supply-demand effects on strategy
- Procedural character generation and modular save/load system

# Al Ecosystem Simulation – Unity, C#

**GitHub** 

- Predator-prey simulation using evolving neural networks & genetic algorithms
- Parallel evaluation & multithreaded FSMs for real-time decision-making
- Tuned performance for 100+ Al agents with concurrent data structures

# Multiplayer Sync & Networking - C#, .NET

GitHub

- Custom UDP netcode with ACKs, delta sync, and sub-100ms latency
- Server orchestration, matchmaking (ELO), and reliable reconnect logic
- 60+ FPS achieved with object pooling & lightweight caching

#### **SKILLS**

- Code: C++, C#, Python, Java, Lua, GDScript
- Engines: Unity, Unreal Engine, Godot
- Concepts: AI (FSMs, GAs, Neural Nets), ECS, Multithreading, Networking, OOP
- Tools: Git, Jira, ClickUp, Photoshop, Maya

## **ACHIEVEMENTS**

- Presenter at EVA Argentina (2023–2024)
- Showcased indie projects at Nucleo Video Game Expo (2023)

# **LANGUAGES**

Spanish: NativeEnglish: Advanced