



**Location:** Montes de Oca, San Jose, Costa Rica | **Phone:** +506 7261 8694 | **Email:** jostinlopezsobalbarro@gmail.com | **Portfolio:**   **J0571N — Game Systems Developer**

## Summary

Self-taught software engineer with a strong background in **C#, Python, and TypeScript**. Experienced in designing **modular, data-driven systems** and scalable architectures for games, tools, and backend services. Known for **reliability, adaptability, and practical problem solving** skills developed through both technical and real-world experience. Currently seeking full-time or contract opportunities in **software engineering, backend development, or applied AI integration**.

## Software Projects

Highlighted projects available for review at portfolio page.

### Local AI Companion Framework – Systems Architect (C#, Python, Local LLMs)

 [github.com/D4RKL0RD-J0571N/local-ai-companion](https://github.com/D4RKL0RD-J0571N/local-ai-companion)

Offline, privacy-first AI companion system with contextual memory and dialogue capabilities.

- Developed modular architecture for dialogue flow, memory persistence, and persona modeling
- Integrated local LLM wrappers for offline inference and response generation
- Enabled persistent, contextual interactions without cloud dependency

### ResourceManager – TypeScript Backend Toolkit (Node.js, TypeScript)

 [github.com/D4RKL0RD-J0571N/resourcemanager](https://github.com/D4RKL0RD-J0571N/resourcemanager)

Modular backend architecture for scalable resource management in web services.

- Implemented controller–service–model structure with role-based middleware
- Emphasized clean design, decoupling, and type-safe data flow using TypeScript
- Demonstrated backend scalability patterns used in modern SaaS and microservice architectures

### 3D Learning Prototype – Modular Game Architecture & Persistence – Solo Developer (Unity, C#)

 [github.com/D4RKL0RD-J0571N/3D-Learning-Prototype](https://github.com/D4RKL0RD-J0571N/3D-Learning-Prototype)

Conceptual RPG framework demonstrating scalable systems for character progression and persistence.

- Designed an **Entity–Attribute–Progression (EAP)** system using Inversion of Control
- Built a robust, data-driven serialization and save/load framework
- Showcased runtime modularity suitable for large-scale RPGs

### Echo-Location Maze System (ELMS) – Solo Developer (Unity, C#)

[github.com/D4RKL0RD-J0571N/MazePrototype](https://github.com/D4RKL0RD-J0571N/MazePrototype)

Procedural maze generator with echo-based reveal mechanics and designer debug tools.

- Built runtime generation logic using event-driven reveal systems
- Created editor tooling for maze preview and tuning
- Enabled rapid iteration for level designers

## Custom HTML5 Video Playback & Control Plugin – Engine Integrator (*JavaScript, RPG Maker MZ*)

[github.com/D4RKL0RD-J0571N/RPGMZ-Custom-Video-Player](https://github.com/D4RKL0RD-J0571N/RPGMZ-Custom-Video-Player)

Extended RPG Maker MZ's engine for advanced video playback and cinematic control.

- Added DOM-level playback speed, looping, and fade transitions
- Integrated custom wait modes and skip input into the engine interpreter

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## Technical Summary

- **Languages:** C#, Python, Java, JavaScript, TypeScript, HTML, CSS, SQL
- **Frameworks & Tools:** Unity, Node.js, Git, Docker, REST APIs
- **Concepts:** Software Architecture, Data-Driven Design, Runtime Systems, AI Integration
- **Soft Skills:** Dependability, Team Collaboration, Problem Solving, Adaptability, Time Management

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## Professional Experience

### Independent Software Engineer / Systems Developer

*Self-Employed / Personal Projects | 2021 – Present | Remote*

- Designed and implemented scalable, modular systems for games and backend tools.
- Built frameworks emphasizing clean architecture and data-driven design.
- Integrated local AI systems using Python and C# for offline inference and dialogue modeling.
- Delivered multiple production-quality prototypes demonstrating full-cycle development.

### Customer Support & Technical Advisor

*ExtremeTech | 2023 – 2025 | Heredia, Costa Rica*

- Began in sales, transitioned to customer service for computer and electronics support.
- Diagnosed and resolved hardware/software issues via phone and remote sessions.
- Focused on customer-first problem resolution, earning consistent positive feedback.
- Helped shape internal procedures for the company's new support division.

### Bar Operations & Service Lead

*Caccio's Rock Bar-Restaurant | 2022 – 2023 | San José, Costa Rica*

- Advanced from dishwasher to managing full bar operations within months.
- Oversaw beverage service, inventory, and staff coordination.
- Trained new hires and maintained closing and cleanliness procedures.
- Recognized for initiative, multitasking, and leadership in high-pressure environments.

## General Support & Maintenance Assistant

*Almacenes Siman | 2018 – 2020 | Curridabat & Escazú, Costa Rica*

- Performed maintenance, logistics, and inventory duties across departments.
  - Assisted technicians with electrical and air-conditioning upkeep.
  - Supported merchandise transfers, restocking, and seasonal decoration projects.
  - Built teamwork, discipline, and reliability through physically demanding work.
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## Education

**Universidad Fidélitas** — Computer Systems Engineering (*Paused*)

Focused on software architecture and systems design. Continuing independent study through applied development.

**Universidad Veritas** — Animation & Visual Design (*Incomplete*)

Explored art, design, and storytelling before transitioning into software engineering.

**Independent Path:** Ongoing self-study in programming, game architecture, backend systems, and AI integration through project-based learning.

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## Languages

**Spanish:** Native

**English:** Advanced (C1 – Professional Working Proficiency)

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## Personal Background & Motivation

Began programming at age 12 by recreating classic games like *Mario* and *Prince of Persia* using offline tools.

Self-taught in programming, art, and music with a strong drive to build complete systems from scratch.

Despite financial challenges, maintained steady progress through continuous independent study and real-world application.

These experiences forged a disciplined, problem-solving mindset and a lasting passion for scalable, creative software design.