

FERNANDO JESUS

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PROFESSIONAL SUMMARY

Game Programmer with 5 years of experience in game development using Unity and C#, working end-to-end on the lifecycle of 2D and 3D projects for mobile and web platforms, from prototyping, architecture, and implementation through to launch and Live Ops. I have participated in the development and launch of +10 games, including Cups, Sniper Master, Sugar Rush, and Farm Vs Aliens (ranked among the top 10 in Latin America by the Google Play Indie Games Fund 2023), with experience in creating gameplay, game systems, mechanics, UI, sound, and effects. I use Object-Oriented Programming (OOP), SOLID, KISS, design patterns, data structures, and algorithms to develop scalable solutions. I have experience in profiling, memory optimization, and resolving ANRs and crashes on low-performance devices, including system architecture and the optimization of a game with over 5 million downloads, reducing the download size by 44% and keeping the ANR rate below 0.47%, which positively impacted retention and commercial performance in the app store. I have worked on multidisciplinary teams, serving as a technical bridge between design and implementation, as well as indirectly leading technical teams of about 4 professionals, including code review, onboarding, documentation, and establishing standards.

EDUCATION

Digital Games Technologist - Federal Institute of Bahia | 2023

PROFESSIONAL EXPERIENCE

Game Programmer | July 2024 - Present

Company: Tech Tree Games LLC

- I have developed systems and features for a 3D mobile game, from documentation through implementation to a playable version, working on code, UI, particles, animations, and other components.
- Have participated in establishing architectural guidelines and development standards, ensuring the project's quality, maintainability, and scalability.
- Managed the technical backlog on Trello, carrying out tasks related to implementation, refactoring, and reducing technical debt.
- Indirectly led a multidisciplinary team of up to 4 professionals, including developers and artists, overseeing onboarding, code reviews, project architecture alignment, feedback, and end-to-end delivery monitoring.
- The implementation of over 30 systems using SOLID principles and design patterns, structuring a scalable, production-ready codebase.
- Optimization of a 3D Tycoon game world for 60+ FPS performance using Unity Profiler, balancing performance requirements with the visual standards defined by artists and product owners.

Game Programmer | Feb. 2021 - Present

Independent Game Development

- End-to-end development of games using Unity and C#, ranging from building scalable systems, gameplay, interfaces, visual effects, and animations to technical integrations, from prototype to final product.
- Prototyping, architecture, and publishing for projects, applying OOP, SOLID, KISS, and design patterns to build scalable systems.
- Developed Scourge Breakers (2026), a 2D turn-based battle game with 40+ playable levels, leading the project from prototype to release on the Google Play Store.
- Implemented systems and integrations with SDKs for login, save states, and in-app purchases, in addition to the game's other features.
- Contributed to Hungry Bat (2024), a Match-3 game featuring various levels, abilities, and gameplay systems, published on itch.io.
- Implemented scalable interfaces, particle systems, effects, and animations in Unity Animator, including frame-by-frame editing.
- Developed Shoot At All to apply the concept of object pooling, used to optimize resource management.

Game Programmer | Feb. 2022 - Jan. 2024

Company: BLU STUDIOS

- Contributed to the development and launch of 5+ 2D and 3D games for mobile and web, designing gameplay, mechanics, systems, and development support tools in Unity and C# for various genres, including FPS games, merge games, and other mobile projects.

- Designed scalable architectures using Object-Oriented Programming (OOP) and Design Patterns, contributing to the organization, maintenance, and evolution of the code, with a focus on performance optimization and memory management for low-performance devices with 2 GB of RAM or less.
- Identified optimization opportunities in the Cups project based on game performance analysis and industry benchmarks, proposing a technical investigation to understand the bottlenecks. Used profiling tools to resolve performance, memory, crash, and ANR issues, reducing the build size by 44% and keeping the ANR rate below 0.47%.
- Developed the core hero system for Farm Vs Aliens, using scalable architectures and new patterns that enabled the team to create new heroes more quickly and with less technical debt accumulation.
- I worked as a co-developer and was directly responsible for the core mechanics of a game selected as one of the top 10 in Latin America (Latin America Games) and awarded funding by the Google Play Indie Games Fund.

COURSES AND CERTIFICATIONS

Introduction to Computer Science - Udemy | 2024

LANGUAGES:

Portuguese - Native

English - Advanced

TOOLS AND TECHNICAL SKILLS

- **Engine and Programming Language:** Unity, C# - Advanced
- **Version Control and Development:** Git, GitHub, Plastic SCM, Visual Studio Code - Intermediate
- **Programming and Architecture:** OOP, SOLID, Design Patterns, Data Structures, Algorithms, and Scriptable Objects
- **Game Development:** Gameplay Systems, Game Mechanics, UI, Unity Animator, Particle System, Cinemachine, and Unity Profiler
- **Integrations:** Third-party SDKs, login systems, Cloud Save, In-App Purchases
- **Platforms:** Android, Web/WebGL