

Juan Carlos G. Mapúa

Systems and Tools Programmer

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Executive Summary

Seasoned and versatile programmer with over 10 years of professional experience in game development. Proficient with C# and C++, engines Unity and Unreal, leveraging strong programming fundamentals and optimization expertise to build robust, scalable systems. Core competencies include gameplay systems, tools development, traditional AI, shaders, and UI/UX programming.

Skill Set

- **Game Engines:** Unity3D, Unreal Engine, Godot Engine
- **Programming Languages:** C#, C/C++, Python, HLSL, ShaderLab, GDScript
- **Source Control & Build Systems:** Git, Plastic SCM, Azure DevOps, Jenkins
- **IDEs:** JetBrains Rider, Microsoft Visual Studio, VS Code
- **Tools & Middleware:** FMOD, Articy:draft, Json.NET
- **Frameworks & APIs:** Steamworks, Epic Online Services, UniRx/R3
- **Art & Design Software:** Blender, Krita, Inkscape, Substance Painter/Designer
- **Collaboration & Productivity Tools:** Slack, Microsoft Teams, Notion, ClickUp, Trello, Miro, Coda, Obsidian
- **Other Skills and Technologies:** Data-driven Development, Automated Testing, Analytics, CI/CD, Scrum

Employment History

Senior Game Engineer | *Dusk Wave Arts, LLC*

2022 - 2025

- Served as Systems, Gameplay, Tools, and Build Engineer on *Barheim*, as Programming Lead on an unannounced multiplayer project, and played a support role for *Stuck in the Present*.
- Spearheaded research and development efforts on emerging Unity tech like DOTS, SRP, and Netcode for GameObjects to bolster institutional knowledge.
- Streamlined workflow for internal distribution and testing with build automation and CI/CD practices using Jenkins and Steam, leading to faster iteration times and improved bug report quality.

Game Engineer | *Dusk Wave Arts, LLC*

2017 - 2022

- Core team member on *Delphyq*, contributing to systems, gameplay, and tools engineering, and collaborating closely with design and narrative teams.
- Wrote and maintained multiple internal Unity packages to streamline development, cut redundant code, and accelerate feature delivery.
- Aided in establishing source control and coding standards, improving code consistency and collaboration within the engineering team.

Game Developer | *Synergy88 Digital, Inc.*

2014 - 2017

- Took on multiple roles such as Programming Lead for *Blade of the Maiden* and Gameplay and Tools Engineer for *Spellstrike* and *Kuna*, among other projects.
- Collaborated with art and animation teams from non-game backgrounds to establish an efficient production pipeline geared towards game development.

Education

B.Sc. Computer Science | *Ateneo de Manila University*

2009 - 2013

Specialization in Interactive Multimedia

Projects



BARHEIM | *Dusk Wave Arts, LLC* (PC, Steam)

Barheim is a 3D time management tower defense game where players mix drinks, and defend their tavern from thirsty Vikings.

[Steam](#) | [Website](#) | [Trailer](#) | [Facebook](#)

- Responsible for initial prototype, core architecture, gameplay, automated testing, UI, tools, and audio integration.
- Worked on Steamworks and Epic Online Services SDK integration and CI/CD, build automation with Jenkins.
- Worked with the narrative team on Articy integration, dialogue system, and narrative tools.



Delphyq | *Dusk Wave Arts, LLC* (PC, Steam)

Delphyq offers a unique Real-time Strategy & Tactics experience that puts you in the seat of the Mastermind.

[Steam](#) | [YouTube](#) | [Facebook](#) | [X/Twitter](#)

- Responsible for unit and squad control systems, abilities system, intel system, level interaction systems, third-party tools integration, cutscene playback system.
- **Recognitions:** *Best Strategy Nominee*, Dreamhack Anaheim 2020; *Indie Prize Finalist*, Indie Prize USA 2019



Spellstrike | *Synergy88 Digital, Inc.* (PC, Steam)

Spellstrike is a fast-paced action brawler set in the fantasy world of Ethir.

[Website \(archive\)](#) | [YouTube](#) | [Facebook](#) | [X/Twitter](#)

- Developed a highly configurable, animation-driven and physics-based character control system.
- Worked with designers to develop a highly flexible, extensible, and designer-friendly ability system.
- Assisted with production of marketing materials by implementing a mock battle scene in-engine.
- **Recognitions:** *Indie Prize Finalist*, Casual Connect Asia 2017; *Featured Pitch*, Square Enix Collective; *Greenlit in 2 Weeks*, Steam Greenlight

For more projects, kindly visit cmapua.github.io.