# Flynn Coulter

Game Programmer & Developer

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Professional Experience

Principal Engineer & DevOps, *Witchkult*
2024 - 2025
- Sole programmer overseeing all technical aspects, including systems architecture, gameplay, and DevOps.
- Implemented and designed editor tools for new gameplay technology.
- Custom HLSL shaders for specific visual style.
- Manage Unreal Engine source upgrades.
- Created custom gameplay event system giving designers complete control over objects in the world with very minimal blueprint setup.
- Extended Unreal Game Sync (UGS) to improve artist workflow by adding profiles that can be managed by engineers.

Principal Engineer & DevOps, *Magnetite Games LLC*
2024 - 2025 (Contractor)
- Sole programmer overseeing all technical aspects, including systems architecture, gameplay, and DevOps.
- Design and implemented editor tools for Designers and Artists.
- Managed internal and play test builds.
- Optimised existing game systems.
- Optimised materials and particle effects.
- Extended Paper2D plugin provided with Unreal Engine 5 to meet technical and design requirements.
- Designed and implemented a Utility AI system for the enemy CPU character.
- Manage Unreal Engine source code changes and upgrades.

Gameplay Programmer, *Digital Confectioners*
2022 - 2022 (Contractor)
- Fix bugs for a client's live service multiplayer game.
- Convert existing game objects for use with a new interlinking project, allowing players to implement their games/game modes using existing game objects.
- Implement gameplay systems from design documents for prototyping using Unreal Engine 5.

Principal Engineer, *Cresthelm Studios AB*
2020 - 2023 (Contractor)
- Sole programmer overseeing all technical aspects, including systems architecture, gameplay, and a small amount of DevOps.
- Implemented and designed editor tools to aid artists.
- Managed internal, QA, and release builds.
- Wrote a custom C# app for handling builds.
- Optimized existing game systems, materials and particle effects.
- Rewrote entire project in 7 months.
- Designed and implemented a custom State Machine for enemy AI.
- Supported post-release builds (patches).
- Improved and extended Paper2D plugin provided with Unreal Engine 5 to meet technical and design requirements.
- Manage Unreal Engine source code changes and upgrades.

Graphic Designer, *Freelance*
2013 - 2019
- Create social media designs for influencers/streamers.
- Logo design and branding for small companies.
- Social media ads.

Primary Skills

| C++ | Odin | Unreal Engine | Git | Perforce |

| Steamworks | EOS | GOG | FMOD |

Projects

Dino, *Game engine / framework*
Odin - SDL2 - DirectX11 - Dear imgui
A hobby game engine / framework that i started after trying out the Odin programming language. Dino is not aimed at being a general engine, but more specific to hobby projects focusing on tooling and technical design.

Dismember, *Runtime dismemberment plugin*
Unreal Engine 5 (solo)
Dismember handles authoring bone groups for limb damage, limb damage, managing VFX, and limb physics. I created a custom editor and asset type making it easy to add, change, and reuse settings.

Dumb robot, *Prototype*
Unreal Engine 5 (solo)
A cleaning-like simulator where you manage robot vacuums. With Dumb Robot, the goal was to explore Debug Visualizers and runtime Render Targets in Unreal Engine 5 in more detail along with the asset manager.

Diluvian Ultra, *Retro FPS*↗
Unreal Engine 4 (team)
A single-player, first-person shooter focusing on a retro aesthetic and fast-paced, strategic combat. The game is set in its own expansive fictive universe. Rather than gritty or dark, Diluvian Ultra is colorful and fantastical, like the cover of pulp sci-fi novels of the past.

Subject One, *Prototype*
Unreal Engine 4 (solo)
A single-player, first-person, lowpoly shooter where movement is everything. Subject One was an experiment to understand how movement in Unreal Engine 4 works and could be customized, while exploring a low-poly art asset pipeline. I was able to write a custom importer script for blender to update models directly in Unreal Engine 4.

References

Gareth, *Witchkult*
✉ Gdrkeenan@gmail.com↗
(other contact info available at request)

Shawn, *Magnetite Games LLC*
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