

KEVIN KNIGHT

SENIOR GAMEPLAY ENGINEER

kevinthomasknight@gmail.com

linkedin.com/in/neweraknight

kevin-t-knight.itch.io

Seasoned gameplay engineer with 12+ years of experience developing and shipping games across all platforms, with 7+ years dedicated to writing networked gameplay code. Adept at finding unique solutions to large, challenging problems and creating intuitive, digestible development tools and pipelines for all departments.

EXPERIENCE

Mountaintop Studios

Spectre: Divide - UE4, PC

Lead Gameplay Engineer | 2023-Present

- Built and led a 4-person team of gameplay engineers across varying experience levels, providing mentorship and direct programming assistance across traversal, camera, networking, progression, and UI
- Diagnosed and fixed critical bugs in a custom networking architecture's implementation of rollback and resimulation, adapted existing gameplay logic to function correctly in the paradigm
- Implemented debugging tools for networking, audio, game capture, combat design, and animation teams

Senior Gameplay Engineer | 2022-2023

- Implemented abilities and fixed bugs in a deterministic state machine system - addressed perf issues and edge-case bugs in player movement and overhauled spectating and camera systems
- Built custom VO and subtitle systems for the game to meet the specific needs of the design team, including importing all VO data in from an external "Source-of-truth" document. Subtitles were more optimized and included dozens more designer-facing options than base Unreal subtitles could provide
- Responsible for the games Localization pipeline, wrote custom tools allowing collaborative auditing of all present lines - including options to bulk-edit, marking ungathered text for localization, and providing documentation about all of Unreal's localization features for UI teams

Iron Galaxy Studios

Various Titles - PC, PS4/5, XB1/sx, Switch

Lead Gameplay Engineer | Rumbleverse, UE4 2018-2022

- Collaborated with all departments to prototype, plan, and implement new gameplay concepts. Provided many ideas that resonated with the team and made it into the final game
- Mentored, tasked, gave coding assistance and feedback to a team of five engineers across networking, AI, and gameplay disciplines
- Designed and implemented several major systems, including a flexible combat system, advanced input handling, and networked traversal system with free-climbing mechanics in an large, open-world environment
- Created and modified in-engine tools to make combat, animation, and FX pipelines faster and easier

Gameplay Engineer | Internal Prototypes 2014-2018

- Deployed to four internal prototypes to quickly build out new ideas across a range of genres, engines, and project lengths
- Implemented basic gameplay loop for a networked strategy game on Switch. Developed "stack-able" data-driven combat effects
- Sole programmer on a beat-em-up prototype. Implemented combat system, item interactions, UI, anim graph, and scripted events
- Developed ranged combat as well as grappling actions and traversal options for a 3D Smash-TV style prototype
- Converted a vertical slice UE4 prototype to native code and wrote new AI solution from scratch

Generalist Engineer | Porting and Co-Development 2012-2014

- Sole engineer on an initiative to create a custom, distributed build system from scratch. Implemented configurable build coordinators that ran on all development PCs during low-usage. Created web portal to manage view the build results.
- Point engineer of a team of two tasked with porting UE3 game to Steam and PSN. Responsible for design and implementation of input conversion, modification of level kismet to maintain playability, and restoration of corrupted Wwise project.

Skills

- Unreal
- "3Cs" Logic
- Network Programming
- Unity
- C++
- Tools Development

Education

DePaul University
BS, Computer Game Development, 2012
Suma Cum Laude