

Benjamin Kimberley

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WINNER 2023
TIGA UK GAMES EDUCATION AWARDS

Profile

I am an experienced Games Programmer with 5+ years in C++, DirectX11/12, with an expanding expertise in Unreal Engine 5. Most recently, I have been the co-director and lead programmer for Scroll Lock Studios, where we are developing a light-based puzzle game in UE5. I also work on my own personal projects, such as the "BEngine", a 2D-focused C++/DirectX12 engine that started development in university for assignments and personal skill development. Through these and a successful education, I have developed wide range of knowledge across several different areas, including using C++ (standalone and UE5), optimization techniques, engine design(systems + pipelining), gameplay/gameplay systems, behavioural AIs and UE5 (node and C++).

Qualifications/Education

Sheffield Hallam University (Masters, First Class Honours: 77.06%)

Sept 2018 – June 2023

- MComp Computer Science for Games (Year 4)
 - Individual Project (45cr, 72%)
 - Advanced Graphics Projects (75cr, 81%)
- MComp Computer Science for Games (Year 3)
 - Research Based Games Projects (100cr, 71.55%)
 - Effective C++ Programming (20cr, 61%)
- BSc Computer Science for Games (Year 2)
 - 3D Games Development(80cr, 81%)
 - Mathematics for Modeling & Rendering (20cr, 72%)
 - Software-Hardware Optimisation Techniques (20cr, 74%)
- Extended Degree in Computing (Completed)

Technical Skills

- Strong working knowledge of C++ and DirectX 11/12
 - C++ level engine design + implementation
 - Gameplay & Gameplay systems
 - Custom AI implementations (A*, Monte-Carlo, Fuzzy Logic, Behaviour Trees)
 - Data-driven design (JSON)
 - Optimisation techniques (SIMD, OOD vs DoD, Threading, Pooling)
- Moderate working Knowledge of Unreal Engine 5
 - Node + custom C++ implementations
- Working knowledge of Unity & HTML
- Version control (Git Flow, github)
- Team communication software (Trello, Clickup, Discord)
- Documentation (UML, Flowcharts, Design Specs)

Previous Experience

Scroll Lock Studios Co-Director/Programmer

Mar 2025 – Now

Working towards a light-based puzzle game based in UE5("A Journey of Light"). My role(s) and responsibilities have included:

- Design and implementation of several gameplay elements and systems (core gameplay functionality, level loading/setup systems & tables), including both node-based and C++ additions.
- Design and implementation of UI (gameplay and navigational UI).
- Broad implementation and management of project structure (github management, unreal project setup, internal file structuring, implementation of design from GameInst level, down to gameplay/pawn level).
- Team management related tasks (resources, leading weekly scrums, problem solutions).

Key Skills

Communication

- A skill that I try to maintain consistently and that has developed through my education, current projects, and competitive environments. Through cross-discipline projects in education between artists, designers and programmers, effective communication and discussion was a must; and something that was well demonstrated through several successful projects.

Problem Solving

- A vital skill developed and constantly challenged through projects. I tend to approach these moments that require large solves with patience, careful planning and research where possible. In my personal projects, a good example of this was a change in what external program was being used for texture/animation data required a redesign on several core classes to accommodate. This taught me a lot about the pitfalls and issues that continuous development can produce in a single project, and how to better solve for these issues in future, or even prevent them.

Teamwork

- Like problem solving and communication, effective teamwork has been key to my successes thus far. An excellent example of this being invited to Games Republic twice in row, with several nominations and winning an award in the Best Team category; something unachievable without solid teamwork.

Hobbies/Interests

No large surprise, but when I am not working I tend to spend my time gaming. My core genres of interest tend to fall into the RPG/Strategy and Roguelike categories, but I play a great deal outside of this as well. I also play/have played a lot of competitive games, such as LoL, Deadlock, and Rivals. Outside of this my "core" games have been Rimworld, OSRS and Noita, alongside WoW, which I play competitively (within reason). Beyond this, I really enjoy reading manga/manhwa and watching anime occasionally. As a recommended read I'd suggest Kagurabatchi, and Dr Stone as a watch (and read).

As a future goal(s), I'd like to learn how to create sprite art (through Aesprite), as well as more casually learn to 3D sculpt via Shapelab.

References Available on Request