Yi Dai

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EDUCATION

University of Southern California   Grad: May 2023
    M.S. Computer Science (Game Development) / Received Dean's Scholarship

University of California, Santa Barbara   Grad: June 2021
    B.S. Computer Science / With Dean's Honors
    B.A. History / With Dean's Honors

SKILLS

- C#, C/C++, Unity, Python, Java, Graphics
- Perforce, Git, Notion, Trello, Maya, Blender, Agile Software Development, Rapid Game Prototyping

EXPERIENCE

[Eye 4 Eye](#) – Game Director, Lead Producer – Unity, C#, Perforce   April 2022 - June 2023

- Led a team of 46 in developing a 1.5-hour, 3D detective game from concept to publication in 14 months. *Eye 4 Eye* has so far received 100% positive reviews from players worldwide on Steam.
- Conceptualized and drove the creative vision, designed and built the original prototypes, pitched the game idea and was selected & funded by USC Games out of 34 submissions.
- Held progress discussions with engineers weekly, and actively provided feedback on Technical Design Document.
- Found and provided clear and detailed reports of bugs for other departments, worked with designers, engineers, and audio designers debugging in C#. 92% of all bugs discovered were fixed by the end.
- Collaborated with designers iterating on puzzles, mechanics, and stories. Designed and built the tutorial level, hosted playtest sessions, liaised with various departments to improve usability and create immersive gameplay.
- Led and managed productions of all 9 departments, wrote and maintained detailed production plans.

[PrimeEngine Development](#) – Engineer – C++, Maya, Lua   Aug. 2022 - Dec. 2022

- Made modifications and implemented new 3D features to a C++-based game engine called PrimeEngine.
- Implemented AABB camera frustum culling which increased the engine's performance by 50%.
- Implemented the engine's physics system with collision detection which physicalizes all meshes in a scene. Implemented gravity for character meshes.
- Developed a tank mini-game in the engine, built upon the physics system by including trigger volume detection. Extended trigger volume detection by making it multi-layered and function differently on different meshes.

[Born Global](#) – Game Development Intern – Unity, C#, Git   May 2022 - Aug. 2022

- Designed and developed a 2D educational game about biomimicry in a team of four. The game was showcased at the 2022 World Biodiversity Forum.
- Prototyped and developed an efficient and scalable crafting system that works with different recipes added by designers. Implemented the crafting UI and connected the system with the inventory.
- Implemented point-and-click 2D isometric character movements using Unity's new input system. Built a complete animation system for the main character's 2D isometric movements. Implemented Navmesh pathfinding.
- Designed, prototyped, and developed a multi-state NPC system for a 2D AI companion that follows the player.
- Implemented a cursor system that changes the cursor when interacting in different areas in the scene and UI.

[Kach](#) – Co-Creative Director, Game Designer, Programmer, Writer – Unity, C#, Perforce   Jan. 2022 - May 2022

- Developed and published a 3D first-person horror game in a team of two. *Kach* has so far received 200+ reviews from players worldwide with a "Very Positive" overall rating on Steam.
- Implemented a robust first-person character controller. Implemented a flexible flashlight control system.
- Prototyped and developed a complex interaction and examination system handling all 32 environmental interactions and 6 unique interactions. Designed and built core ambient elements including the teleporting statue.