



# GAMES IN VIRTUAL WORLDS

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## REAL TIME 3D ENVIRONMENTS

Virtual worlds are three-dimensional environments that can provide compelling shared experiences for their users. These media-rich immersive spaces can connect to social networks, web-services, and data to bridge into an entire universe of external content. The IDIA has developed scores of projects in virtual worlds and game environments including Blue Mars, Unity 3D, Second Life, Open Simulator, and Quest 3D.

The IDIA built and animated Odie's character using Maya 3D, an industry standard animation software package used in the feature film and visualization industries. This game that IDIA designed with Paws characters, was developed in Unity 3D.

Paws characters Odie, Garfield and the neighborhood were then brought into the Unity game engine where the lighting, real-time shadows, and physics simulations were designed. Unity's scripting capability was also utilized to control the Odie character's animation and movement, trigger collision sounds, and animate Garfield as Odie moves by. There are a selection of objects for Odie to interact with, each with its own physical properties including weight, friction, and bounciness.