

BOIDS SIMULATION – UNITY3D

I have implemented Craig Reynolds Boids simulation approach from 1987 SIGGRAPH paper.

Simulation consists of a beautiful scene with a terrain which I have created. Scene consists of a terrain with a small water body and two buildings at the midst of it. Attractor(cube) and predator(sphere) can be seen in the scene.

My boids are JET meshes which I borrowed it from a free models website and I loaded them into the scene. As soon as the scene is loaded, JET+BOIDS = JOIDS are loaded in and they start moving towards the attractor.

Following are the controls for running the simulation,

- Simulation consists of a First person controller script attached to the camera in the scene
Camera can be controlled by using the navigation keys.
- Attractor(cube) can be controlled by using the following keys
Left = key "A"
Right = key "D"
Front = key "W"
Back = key "S"
Up = key "E"
Down = key "R"

Using the above controls the attractor cube can be moved anywhere in the scene and the boids change their direction and always move towards this cube.

- Predator sphere can be controlled using the following keys
Left = key "J"
Right = key "L"
Front = key "I"
Back = key "K"
Up = key "O"
Down = key "P"

Using the above controls the predator sphere can be moved anywhere in the scene and the boids change their direction and move away from it.

My Jet mesh can be replaced with any other model or even cone and the same project files will work the same. Controls for the simulation makes it fun to play with boids.