

Building Dynamic & Interactive Natural Game Worlds

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Abstract

Dynamic game worlds are game worlds which change over time according to a given rule set. Interactive game worlds allow for users to modify the state of the game world in some way. Combining these two concepts together can result in more immersive and believable game worlds. It can also lend itself to the creation of new game play mechanics.

This project will look at how natural processes can be modelled to create believable, macro-scale dynamic game worlds with high levels of user interaction. It will discuss the different components that make a natural dynamic world and explore how they can be modelled.

A prototype combining these systems together will be designed and then implemented. It will demonstrate how the different components of the dynamic world will work together. The prototype will be highly interactive, allowing the user to actively interact with these systems in real time and discuss the potential applications of such a system.

Video Link

<https://youtu.be/zxTImgjmvNA>