Informatics Institute of Technology

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Raidan:

A Multiplayer AI Gaming Platform: Uniquely Customizing the Game Environment through Player Specific Learning

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Abstract

Gaming has fascinated the minds of many people, young and old alike. It is both an obsession, and a healthy dose of non-reality that helps players immerse themselves in another world. As fascinating as this maybe, Artificial Intelligence has added to the quality of this experience whether players may sense it or not. Since the advent of the mid 2000's, game AI has risen in popularity and has been an integral part of video games.

Further, games are a great tool that can act as a simulation ground where ideas and concepts that are not ready for the real world can be tested. *Raiden* is at first a concept that revolves around the idea of justice, where the aim is to measure each individual by a standard unique to them. Multiplayer gaming is an ideal simulation ground where people with varying personalities and skills find common ground, and so tend to gather. When infused with Artificial Intelligence, this concept grows into a learning model where the standards for treating players are learnt based on the player's terms rather than being preprogrammed.

Putting all of these elements together, the *Raidan* system aims to learn the level of a player's skill or aptitude and adjust the environment in a way that it will be unique to each player. The primary aim is to use gaming and AI as a testing ground for the concept, and upon success, venture into other avenues where the concept will be a powerful tool.