

Intelligent Computer Entertainment Laboratory

Research/Development Areas

Intelligent Techniques for Increasing the Entertainment Value of Computer Games

<http://www.ice.ci.ritsumeai.ac.jp/>



Head researcher: Ruck THAWONMAS

Artificial Intelligence

We focus on applications of artificial intelligence and other intelligent techniques to well-being games, video game live streaming, and digital humanities. If needed, basic research in relevant areas is also conducted.

In the first theme, our aim is to develop intelligent game mechanisms, using, for example, Monte-Carlo tree search, for promoting physical, mental, and social well-being. For video game live streaming, intelligent techniques -- deep learning, etc. -- are being researched for automatically generating gameplays suitable for each

spectator. In the third theme, we aim at promoting cultural content through exploiting state-of-the-art artificial intelligence methods such as recommender systems.

Evolutionary Computation

Here we study evolutionary computation (EC) that is the optimization technique inspired by the nature evolution mechanism.

We explore EC algorithms to automatically generate game stages depending on players' skill. We also develop EC applications to automatically adapt parameters of non-player characters.

