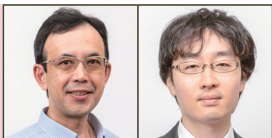# Intelligent Computer Entertainment Laboratory

Intelligent Techniques for Increasing the Value of Computer Games & Adaptive Artificial Intelligence in the Real World: Symbol Emergence in Robotics

Head researchers: Ruck THAWONMAS, TANIGUCHI Akira

We divide into two teams as follows.

Team RT:

Our research emphasizes applying artificial intelligence and other intelligent methods to computer games for well-being games, live video game streaming, and digital humanities. Related basic research is conducted on a case-by-case basis as needed. We are currently pursuing the potential of generative AI, large-scale language models, and prompt engineering.
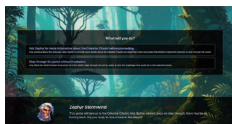
These technologies will enable us to provide more realistic and engaging — serious or non-serious — game experiences. These studies will also help game developers explore new game mechanics and create more engaging games for players.

Team AT:

Humans acquire concepts and behaviors through physical interactions with their environment and by imitating others, eventually enabling communication. To reveal such emergent intelligence will be essential for understanding human intelligence and society. This theme aims to understand human intelligence and create artificial intelligence by covering a wide range of fields including machine learning and robotics.

By participating in intelligent robot competitions, we have been challenging ourselves to realize robots capable of real-world communication. We are also focusing on collaborative learning between humans and machines and brain-inspired artificial intelligence.