MIYAKE LAB.

Linking Smart City and Metaverse by Spatial AI

Interspace Research Center

Spatial AI

https://miyayou.com/
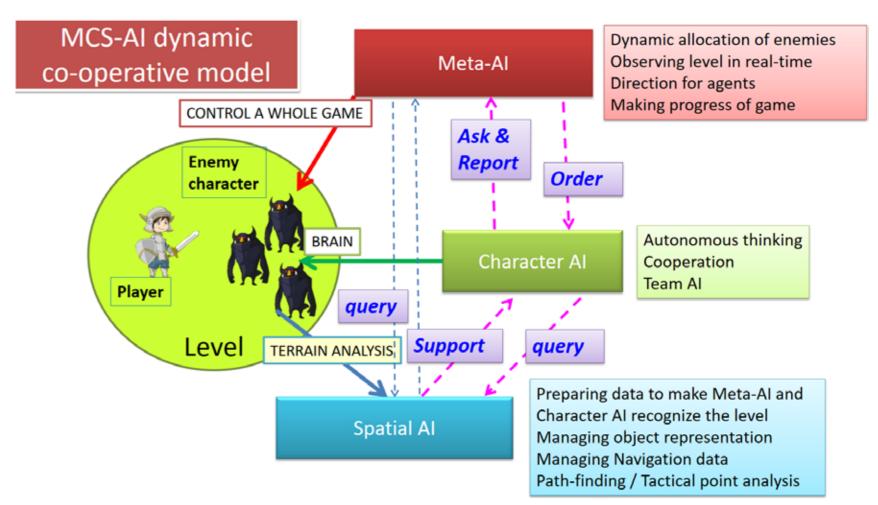https://commonground.iis.u-tokyo.ac.jp/

The term "spatial AI" refers to the use of space itself as AI. We aim to make the entire urban space intelligent by laying down these spatial AIs in the real space.

Meta AI, Character AI, Spatial AI

"Character AI" is a brain of robot or agent. An AI that controls such characters and the world is called "Meta AI". An AI that turn space into AI are called "Spatial AI". The autonomous distributed cooperative model connecting these three AIs is called the "MCS-AI Dynamic Cooperative Model. Our research is to utilize this model as an architecture for the smart city to make the city itself into AI.
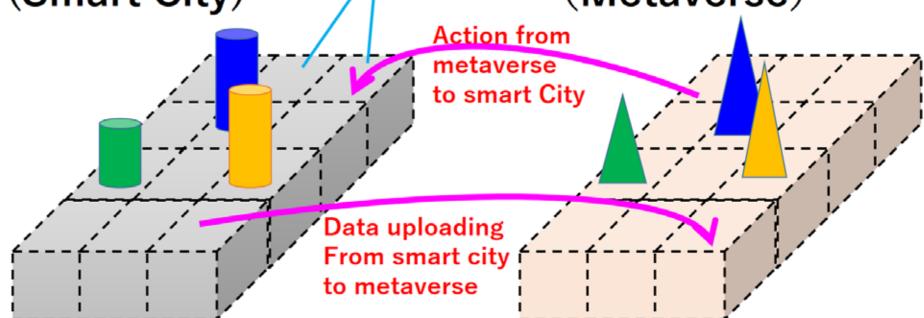

Spatial AI and Metaverse

Spatial AI makes the space itself an AI. Spatial AI has its own controlled domain space, recognizes the situation within the space, and orders and influences the AI and machines in the space. Spatial AI also transfers its own information of the space to the metaverse to link the smart city and the metaverse.

Smart City

A smart city is an intelligent city itself. A smart city protects the city and its inhabitants against the external environment, such as the atmosphere and disasters, while understanding the internal state of the city itself as a body and taking care of it. Smart cities are not only necessary architecture for the Earth, but also for the space age, for cities on the Moon and Mars.

Institute of Industrial Science, The University of Tokyo