Human centric digital twins services

R&D Project Title
  Multidimensional digital twin sensing and reconstruction based on high-speed vision

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Summary :

Conventional information environments are constructed with sensor-display technologies based on an ability of human (30-60 fps), resulting in a spatio-temporal gaps in the real world, and dealing with a digital twin that lacks dynamics and reality under the limitations of latency and worn devices. This problem is a major obstacle in the creation of a comfortable next-generation information society for remote work, tele-surgery, and automated driving.

In this project, high-speed sensing based on 1,000fps vision, which is far faster than that of humans, and the development of optical systems, robots, and display handling the sensing technologies, will be integrated with spatial and various modal information based on the time axis, thereby creating an information environment that can handle multidimensional digital twins without spatio-temporal gaps. The technologies will be used as a platform multidimensional digital twins in real time to create various innovative services and businesses, and its effectiveness will be demonstrated mainly in the fields of factory automation, inspection, and media.

Strategy of this project