## **Human centric digital twins services**

Remotification of physical interaction for resilient society

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## **Summary:**

We aim to create a society that is resilient to infectious diseases, by using avatar robots to enable telework for essential workers whose work requires physical contact with people.

We will conduct research and development of a tele-physical caregiving service that enables telework in caregiving.

In this service, a caregiver operates a nursing care avatar at the nursing care site from a remote location via a digital twin of the nursing care site built in cyberspace to perform nursing care tasks. To realize this service, we will conduct research and development on the following three technologies.

- (1) Haptic sensing technology that captures complex physical information as a distribution on a three-dimensional curved surface,
- (2) Technology for understanding and reproducing the movements of a remote caregiver, and
- (3) Safety standards that are essential for social acceptance.



Service delivery from a safe environment

Infecting and exposing worry-free service use