Human-centric Digital Twins Services Utilizing AI, Big Data and IoT

R&D Project Title Building Digital Scent Technology Based on Odor Reproduction

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Summary :

Although scents cannot be treated as digital information at the current stage, it would be possible to express quite new sensory information if we could incorporate olfaction into information. Therefore, we will develop digital scent technology that can reproduce scents using a small number of odor components, and realize a scented cyberspace.

This research will make it possible to express information that could not be adequately conveyed only through audiovisual senses. In the exploratory research, we worked with companies to develop an olfactory display and content that can blend odor components to reproduce the scent in real time, and conducted numerous demonstrations. In the full-scale research, we will expand the range of scents that can be reproduced. Then, we will expand the scent reproduction technology and its applications, thereby carrying out the following tasks and building digital scent technology.

1: Reproducing scents using odor components and expanding the range of scents we can handle

2: AI that creates desired scents based on linguistic expressions

3: Establishment of scent presentation technology through olfactory display and content, followed by the verification of its effectiveness



