

The Realization of an Avatar-Symbiotic Society where Everyone Can Perform Active Roles without Constraint

Project manager

(Selected in 2020)

ISHIGURO Hiroshi

Professor, Graduate School of Engineering Science, Osaka University



Leader's institution

Osaka University

R&D institutions

ATR, Kanazawa Univ., Keio Univ., Kyoto Univ., Kyushu Univ., Meiji Univ., Nagasaki Univ., Nagoya Inst. of Tech., Nagoya Univ., NICT, Osaka Univ., RIKEN, Ritsumeikan Univ., Seikei Univ., Shibaura Inst. of Tech., Sony Group Corp., The Technical Univ. of Catalonia, Tohoku Univ., UEC, UTokyo

Summary of the project

By developing cybernetic avatars (CAs) with the essential function of hospitality-rich and moral dialogue, this project will realize an avatarsymbiotic society where even people constrained by time and space can participate in various social activities through remote operation of CAs. In this new society, diverse human resources can quickly solve problems by utilizing CA through remote operation even when social-scale problems occur. Thus, the society will successfully transform into a large scale remote mutual aid society. Moreover, the intervention of CA will lead to a secure daily life for the people who live alone as different professionals watch them over.

After CA technology enhances operators' physical and cognitive abilities and strengthens their vitality, our goal by 2030 is for multiple operators to engage in educational, medical, and other tasks by teleoperating with several CAs. By 2050, everyone, not only specialists, will be able to expand their ability to work more actively regardless of time and space via CA. The dramatic lifestyle change will bring us to realize an avatar-symbiotic society well-balanced between CA technology and community.



Milestone by year 2030

[Realization of a large-scale and remote mutual aid society]

In times of disasters/pandemics, each specialist juxtaposes CAs and coordinates CAs for dialogue and action. Then we can efficiently get a picture of damage or epidemic situations from hard-to-reach places.

[Allowing a secure daily life watched over by different professionals]

Owing to professionals of law, medical/nursing care, and education operating CAs (for half-automation) and coordinating with other CAs, the elderly or challenged will be able to receive necessary services (care, consultation, motion assistance, learning support) anywhere, at any time.

Milestone by year 2025

[Enabling people in various situations to participate in social activities]

In an open place (e.g., facilities, or Expo), housewives, househusbands, the elderly, and the challenged can involve in amiable conversation and activity under CA's control which can interact with other CAs, and understand users' needs that vary with age, gender, nationality, and disabilities.



