

# Opening Address

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## **Recent Achievements and Future Visions on Collaboration through High Speed Computer Networks**

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Collaboration through a high-speed computer network is so significant in today's society. I will introduce how the computer network is really working in Japan, especially at Kyoto University.

The TIDE (Transpacific Interactive Distance Education) Project is a real-time distance education between Kyoto University and UCLA, which was continued for five years until last year by using 4Mbit leased line. The purpose of this project was to investigate the possibility of lecture exchange between the U.S. and Japan, compare the lecture styles in different cultures, and make experiments of education with IT such as a camera system, a presentation system, a network system and a content delivery system. Kyoto University developed a distance education system, which enables an effective class with advanced functions such as an automatic camera focusing on speaking students. The project has also contributed to the establishment of human relationships between Kyoto University and UCLA students.

Kyoto University has also been developing a digital library, which stores not only documents but also a lot of precious ancient drawings open to the public through the Internet.

For the infrastructure of high-speed computer network, JGN (Japan Giga-bit Network) I and II project have been carried out. The JGN-II project now has been extended to the U.S. and China.

Current projects we have now in NICT include "Ubiquitous Home" which provides convenience to living persons, such as watching children in a baby room from kitchen while cooking, enjoying a video program taken by husband in his study room, as well as in a living room by his wife and children simultaneously.

Now communication environment is growing rapidly and getting more and more convenient. Not only person-to-person communication but also person-to-machine and machine-to-machine communication is quite important. I hope that this conference will be fruitful for discussing on human-to-machine communication, especially in Squeak and Croquet environment.