Special Feature: New Trend in Integrated Field of Communication Technology

Introduction

Extensive research is being undertaken in the communication science and technology field. What was once believed to be impossible is now being achieved thanks to advances in research and the rapid growth of computer power. The time may be approaching when the technologies needed to solve various real-life problems will become available. We may be entering the Cambrian period of information and communication technology.

At NTT Communication Science Laboratories, we carry out research in various areas including natural language processing and the signal and information processing of sound, images, and video. We are also striving to merge these technologies and thus solve the difficult problems found in real situations with a view to creating the communication environment of the future.

The following two articles introduce recent results from our laboratories that integrate our cutting-edge research achievements in media technology. The first introduces the World-Wide Media Browser, which combines technologies related to speech recognition, natural language processing, and machine translation. The second describes audio-visual technology for conversation scene analysis, which is based on the latest audio and computer vision technology resulting from our own research.

I am sure that readers will be inspired and encouraged by the promising results in communication science and technology that these articles represent.

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