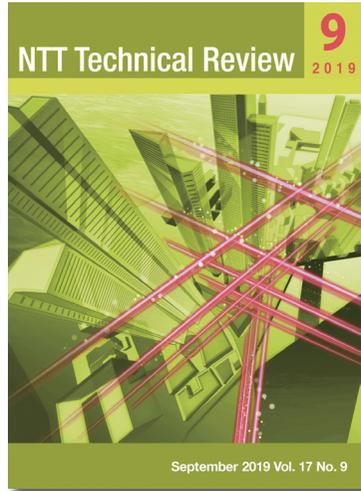


<https://www.ntt-review.jp/archive/2019/201909.html>



## Feature Articles

### Artificial Intelligence in Contact Centers—Advanced Media Processing Technology Driving the Future of Digital Transformation

- ▶ Advanced Initiatives for Contact Center AI
- ▶ Evolution of Speech Recognition System—VoiceRex
- ▶ Toward Natural Language Understanding by Machine Reading Comprehension
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## Regular Articles

- ▶ Towards Secured and Transparent Artificial Intelligence Technologies in Hierarchical Computing Networks

## Global Standardization Activities

- ▶ Report on the 22nd Global Standards Collaboration (GSC-22) Meeting

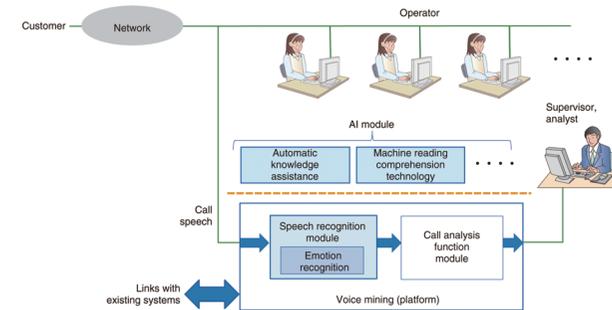
## Feature Articles

### Artificial Intelligence in Contact Centers—Advanced Media Processing Technology Driving the Future of Digital Transformation

#### Advanced Initiatives for Contact Center AI

##### ▼ Abstract

Contact centers are becoming increasingly important as a point of contact where feedback from many customers can be obtained. NTT Media Intelligence Laboratories is carrying out research and development of the application of artificial intelligence technology in contact centers. This article introduces some of the latest technologies for solving various issues at contact centers using the speech and natural language processing technologies that we have cultivated over many years.



## Regular Articles

### Towards Secured and Transparent Artificial Intelligence Technologies in Hierarchical Computing Networks

##### ▼ Abstract

Researchers at NTT Network Innovation Laboratories have recently been focusing on the interdisciplinary of transparent artificial intelligence (AI) technologies and hierarchical computing networks. A hierarchically distributed computing structure not only improves the quality of computation but also creates an extra degree of diversity for algorithm refinement. Sparse coding, an important transparent AI technique, is finding application in this new domain. We propose in this article a secure sparse coding scheme that enables computing directly on cipher-texts. We also demonstrate its application to image compression and face recognition in edge and cloud networks.

