



KONICA MINOLTA

## News Release

# Konica Minolta's Paper on AI Technology Accepted for ACL 2026, One of the Leading Conferences in the Field of Natural Language Processing

## Proposing a Technology for Understanding Human Actions with High Accuracy Based on Limited Observation Information

Tokyo (June 26, 2026) - Konica Minolta, Inc. (Konica Minolta) today announced that its paper on the development of AI technology for action recognition was accepted for the main conference of ACL 2026, one of the leading conferences in the field of natural language processing (NLP).

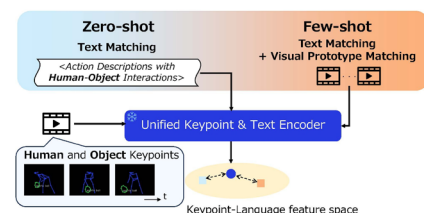
ACL 2026 (Annual Meeting of the Association for Computational Linguistics) is a top-tier international conference in the field of natural language processing. This year, it will be held in California, the U.S., in July. For ACL 2026, 2,309 out of 12,148 papers were accepted for the main conference.

### Details of Research

Konica Minolta has been enhancing customer value and improving business productivity by utilizing AI and data based on its Corporate Plan 2026–2028. The Company has also been advancing R&D on high-accuracy action understanding technology based on limited observation information at medical and manufacturing facilities by combining its time-tested sensing technology and AI technology. As part of such technology development, this research, which is described in the accepted paper, achieved high-accuracy action recognition by utilizing generative AI technology.

Compared with conventional action recognition methods based on human poses and object information represented as point clouds, this research enhanced the accuracy of action recognition, in which inference is performed based on human-object relations in a video by generating linguistic expressions of objects interacting with humans using generative AI and building them into a model.

Konica Minolta also developed a tuning method to reduce variations in detection accuracy, which are attributed to imaging conditions, without additional training by representing the imaging environment for humans based on a trained model and utilizing it as reference data. This enabled detection accuracy equivalent to that of a model that processes the entire image, even though inference is performed using point cloud data.



Source: paper accepted for ACL 2026  
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The keypoint data shown in this figure are derived from the Kinetics-400 dataset, which is licensed under the Creative Commons Attribution 4.0 International License.

This technology enables high-accuracy action recognition on lightweight devices and supports deployment in a wide range of settings, including medical and manufacturing facilities. It is expected to be used to improve work efficiency and detect anomalies.

**Accepted Theme**

Title	InsAT: Instance-aware Semantic Alignment and Transfer from Human-Object Keypoints for Zero-to-Few-shot Action Understanding
Researcher	Kazuki Tsutsukawa  AI Technology Development Division, Data Science Center, Corporate Technology Development Headquarters, Konica Minolta, Inc.

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