

The Feasibility of Network Data Transmission Reducing based on Vision Language Model (VLM)

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Abstract—This study verifies that transmitting plain text descriptions, instead of image files, can effectively reduce network transmission when conveying moods or concepts through images. The proposed approach requires only 1–1.25% of the data size of the original image. A data structure integrating a basic vision-language model with relational links between multiple objects is implemented. Experimental results confirm the feasibility of translating images into descriptive text for network transmission. Both reduced data load and preserved semantic content for efficient communication would be available.

Keyword—Image Recognition, Artificial Intelligence, Vision Language Model, Network



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