

# —— CALL FOR PAPERS —— Special Topic: Large Multimodal Models

Recently, large multimodal models have received widespread attention and experienced explosive growth both in academia and industry. They have demonstrated significant potential in fields such as content understanding, search, recommendation systems, question answering, and human-computer interaction. This special issue aims to stimulate and publish cutting-edge, original research, comprehensive reviews, and insightful benchmark studies focusing on, but not limited to, the following areas:

- (1) Advanced Architectures for Large Multimodal Model: Delving into novel model structures that offer seamless integration and efficient processing of multimodal information.
- (2) **Creative and Generative Approaches in Large Multimodal Model**: Exploring generative models and creative algorithms within multimodal frameworks for novel content generation, augmentation, and interpretation.
- (3) **Innovative Applications for Large Multimodal Model**: Showing applications of advanced multimodal models in critical domains such as medical diagnosis, document analysis, and computer vision, highlighting transformative impacts.
- (4) Benchmarks and Evaluation for Large Multimodal Model: Establishing novel metrics and benchmarks to accurately evaluate the capabilities and performance of advanced multimodal models in varied settings.
- (5) **Strategies for Scaling Multimodal Learning**: Introducing methods and practices for scaling Large Multimodal Model to accommodate extensive and diverse data sets effectively.
- (6) Adaptation and Transfer Learning in Large Multimodal Model: Investigating how advanced multimodal models can be fine-tuned or adapted for specialized tasks across different domains.
- (7) **Ensuring Robustness and Fairness**: Addressing the critical challenges in achieving robustness, interpretability, and fairness within Large Multimodal Models, including strategies for hallucination detection and mitigation.
- (8) **Multimodal Reasoning in Large Multimodal Model**: Exploring how large multimodal models can perform complex reasoning tasks by integrating information from multiple modalities. This could involve logical reasoning, causal reasoning, and commonsense reasoning in multimodal scenarios, for example, answering questions that require cross-modal understanding and inference.
- (9) Acceleration and Deployment for Large Multimodal Model: Presenting methods and technologies for accelerating the inference speed of large multimodal models, such as quantization, pruning, and hardware-aware optimization. Also, discussing strategies for efficient deployment of these models in real-world applications, considering factors like latency, resource utilization, and scalability across different platforms, including cloud, edge, and mobile devices.

### **Submission**

The papers should be prepared using the SCIS template, and should be submitted online through the manuscript submission system of the SCIENCE CHINA Information Sciences. The submission website is <u>https://mc03.manuscriptcentral.com/scis</u>. You should choose **Special Topic: Large Multimodal Models (2025)**. Information and guidelines on preparation of manuscripts are available on the journal website: <u>http://scis.scichina.com</u>.

#### **Important Dates**

Manuscript submission deadline: May 20, 2025 First Round of Reviews: Jul. 1, 2025 Final Acceptance Notification: Oct. 1, 2025 Publication: Dec. 1, 2025

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