

# Call For Papers

**Special Session:** Big Data Techniques for Computer Vision

**Conference:** The 2023 International Conference on Cyber-physical Social Intelligence (ICCSI)

**Date:** October 20-23, 2023

**Meeting mode:** In-person

**Location:** Xi'an, China

**Web site:** <https://agist.org/iccsi2023>

Today, big data, which refers to vast amounts of large data sets has gradually become a ubiquitous resource for the development of high technologies in modern industry. Artificial Intelligence (AI), machine learning, and deep learning are pulling from every data input and using those inputs to generate new rules for future technological advancement. As a branch of AI, computer vision uses digital images in cameras, videos, and other visual inputs to train computers to gather relevant information from the visual world and take action or make recommendations based on that information, which can help significantly boost the efficiency of industrial production. Computer vision is highly dependent on the quality and quantity of data. Thus, more data with better quality will establish better learning models. However, the transfer of big data technology to another subject domain does not involve simply copying a selected set of methods. Some challenges exist in the combination of big data and computer vision: First, it is difficult to read or retrieve valid data; second, it is difficult to model multimodal or multivariate noise data; third, it is difficult to calculate for the relatively large scale of data; fourth, it is difficult to generalize to different visual characters while trained on the single visual task. Inspired by this, this special issue aims to promote research in this emerging area of Research, Development, Computing, Algorithms, Systems, and Applications.

*Interested topics include (but not limited to):*

- Data storage and management
- Data searching and mining
- Big data infrastructure and systems
- Big data processing and analysis
- Big data models, algorithms, and architectures
- Deep learning
- Artificial Intelligence
- Computer vision
- Image processing
- Real-time video processing
- Image classification
- Object localization
- Semantic segmentation
- Instance segmentation

## **Important Dates:**

|                  |   |
|------------------|---|
| March 31, 2023,  | Letter of intent for paper contribution |
| May 15, 2023,    | Full paper submission                   |
| July 1, 2023,    | Acceptance/Rejection notification       |
| August 31, 2023, | Final camera-ready papers due           |

**Special Session Co-chairs:**

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*All inquiries about the session, including the letter of intent, should be sent to any of the co-chairs above*