

2024 8th  **ICVISP 2024**

International Conference on Vision,
Image and Signal Processing



CONFERENCE PROGRAM

2024. 12.27-29 Kunming, China

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www.icvisp.org



WELCOME LETTER

Dear Distinguished Participants,

It is our great pleasure to invite you to 2024 8th International Conference on Vision, Image and Signal Processing (ICVISIP 2024), which is organized by Yunnan Normal University, co-organized by Sun Yat-sen University, College of Computer Science and Software Engineering, SZU and National Engineering laboratory for Big Data System Computing Technology. The conference will take place from December 27th to 29th, 2024, in the captivating city of Kunming, China

Vision, image, and signal processing play vital roles in contemporary society, being closely interconnected and collectively advancing technological advancements and societal growth. Visual technology encompasses a comprehensive range of activities, starting from fundamental image capture to intricate image analysis and comprehension. Preprocessing of images plays a significant role in improving image quality, thereby establishing a solid foundation for subsequent analysis and recognition tasks. Signal processing is essential for facilitating vision and image processing by improving the effectiveness of transmitting and storing image and video data, as well as providing reliable tools for image and video analysis.

The conference aims to bring together researchers, engineers, scientists and industry professionals in the areas related to Vision, Image and Signal Processing in a single platform and to present their stimulating research and knowledge transfer ideas in both Vision, Image and Signal Processing. Leading researchers and industry experts from around the globe will present the latest studies through oral or poster presentations.

We look forward to meeting each one of you at ICVISIP 2024!

ORGANIZING COMMITTEE

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CONFERENCE VENUE



Conference Venue: Yunnan Normal University, China

会议地点：云南师范大学

Detailed Address: No. 768, Juxian District, Kunming, China

详细地址：云南省昆明市聚贤街768号



昆明长水国际机场 Kunming Changshui International Airport

驾车距离32.4公里，约46分钟 32.4 kilometers, about 46 minutes drive

昆明南站 Kunming South Railway Station

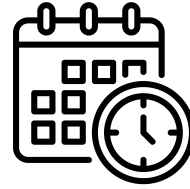
驾车距离3.9公里，约8分钟 3.9 kilometers, about 8 minutes drive

昆明站 Kunming Railway Station

驾车距离28.5公里，约50分钟 28.5 kilometers, about 50 minutes drive



CONFERENCE PROGRAM



DEC. 27
(FRIDAY)

10:00-18:00--Onsite Registration

DEC. 28
(SATURDAY)

9:00-18:00--Conference Sessions

DEC. 29
(SUNDAY)

Tours / Social Events
(To be determined)

CONFERENCE

PROGRAM

Dec 27, 2024 GMT +8 Friday	
10:00-18:00	Registration & Conference Kits Collection
Dec. 28, 2024 GMT +8 Saturday	
09:00-09:10 Opening Ceremony	To be confirmed
09:10-09:50 Keynote Speaker I	Prof. Pavel Loskot
09:50-10:30 Keynote Speaker II	To be confirmed
10:30-11:00	Tea Break and Group Photo
11:00-11:40 Keynote Speaker III	To be confirmed
11:40-12:00 Keynote Speaker IV	To be confirmed
12:00-14:00	Lunch Time
14:00-18:00	Parallel Sessions
18:00-18:30	Award & Closing Ceremony
18:30-20:00	Dinner Time
Dec. 29 , 2024 GMT +8 Sunday	
09:00-18:00	Video Session & Laboratory Visit

CONFERENCE

SESSION

Dec. 28, 2024 | GMT +8 | Saturday

09:00-09:10—Opening Ceremony

To be confirmed

09:10-09:50—Keynote Speaker I



Prof. Pavel Loskot

ZJU-UIUC Institute, China

Title: Estimation Problems in Array Signal Processing

Abstract: Spatial signals are generated by spatially distributed sources, which are then simultaneously observed in multiple spatial locations. The spatial dimension allows one to assume the spatial signals to be a special case of images, however, the former are also time-varying, and they are often modeled as Gaussian random processes. The example scenarios include radiowave propagation between the transmitting and receiving antennas in wireless communication systems, multi-channel EEG measurements, remote sensing in complex environments, and also multi-projections in general tomographic reconstructions. The signal processing problems appearing in all these scenarios always involve some form of inverse problems requiring to infer the parameters of the spatial signals in order to spatially resolve and combine the signals, spatially extrapolate the signals, and extract or reconstruct information about the sources. In this talk, we will focus on reviewing the key ideas and results in array signal processing where the spatial locations of the observers are known, and the task is to infer the key parameters of the incoming time-varying 3D random field such as the direction of arrival, amplitude and frequency shift, which are then used to design beamforming schemes for antenna arrays in wireless communications. We will show that the problem formulation and the solution can differ significantly when the signals can be considered to be narrowband and when they must be considered to be wideband.

Organized by



Co-organized by



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