

## **ARCAI 2024 Special Session “Intelligent Visual Perception and Detection”**

**Principal Organizer(s): Jianwei Zhao, Minchao Ye, Li Yang, Xiaoping Jin, Zhenghua Zhou**

1. Jianwei Zhao, [zhaojw@cjl原因.edu.cn](mailto:zhaojw@cjl原因.edu.cn), China Jiliang University, Hangzhou, China
2. Minchao Ye, [yeminchao@cjl原因.edu.cn](mailto:yeminchao@cjl原因.edu.cn), China Jiliang University, Hangzhou, China
3. Li Yang, [13A0303131@cjl原因.edu.cn](mailto:13A0303131@cjl原因.edu.cn), China Jiliang University, Hangzhou, China
4. Xiaoping Jin, [jxp1023@cjl原因.edu.cn](mailto:jxp1023@cjl原因.edu.cn), China Jiliang University, Hangzhou, China
5. Zhenghua Zhou, [zzh2023@zufe.edu.cn](mailto:zzh2023@zufe.edu.cn), Zhejiang University of Finance and Economics

### **Call for Papers:**

With the rapid development of artificial intelligence and robotics, robot is playing an increasingly important role in various fields. In order to enable robots to explore and understand the unknown environment effectively, effective visual perception becomes the most critical part. The development of advanced intelligent visual perception and detection algorithms has great importance in improving the perception precision and detection precision, and of course the production efficiency of industrial manufacturing fields and life field. Therefore, this special session seeks to highlight and present the growing interest in emerging research and development in intelligent visual perception and detection theory and their applications in industrial manufacturing fields and life field. Topics of interest include, but are not limited to:

- Image reconstruction based on deep learning
- Image denoising based on deep learning
- Remote image classification based on deep learning
- Video tracking within the framework of deep learning
- Pattern recognition based on deep learning
- Image content generation based on deep learning
- Fault detection based on deep learning
- Medical image detection based on deep learning

Accepted and presented papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore’s scope and quality requirements and indexed by EI Compendex and Scopus. Selected papers will be invited to SCI Journal Special Issues.