

# Conference Program 会议日程

# 7<sup>th</sup> CSAI 2023

Beijing, China | December 8-10, 2023  
中国北京 | 2023年12月8-10日

## 2023 7th International Conference on Computer Science and Artificial Intelligence 第七届计算机科学与人工智能国际会议

Organized by 主办单位



Published by 出版单位



Technical Sponsors 技术支持



Warsaw University  
of Technology

DEC 8-10 | 12月8-10日

BEIJING | 北京

# CSAI 2023



## ◆ Onsite Venue

**北京华腾美居酒店**

**MERCURE BEIJING CBD**

地址：中国北京市朝阳区西大望路甲 16 号院

ADD: No.16 Jia, Xi Da Wang Road, Chao Yang District,  
Beijing, 100124, China

Web: <https://all.accor.com/hotel/7565/index.en.shtml>

## ◆ Online Link

**Room A: 668-6527-8590**

Link: <https://meeting.tencent.com/dm/3VOtvf01eTDt>

**Room B: 371-4663-3757**

Link: <https://meeting.tencent.com/dm/p9NUOJCrOzjV>

**Time:** Beijing Time (GMT+8)

## TABLE OF CONTENTS | 目录

<b>Agenda Overview</b> 日程概览 .....	1
<b>Welcome</b> 欢迎辞 .....	2
<b>Conference Committee</b> 委员会 .....	3
<b>Conference Venue</b> 会议地点 .....	4
<b>Onsite Guideline</b> 线下参会须知 .....	6
<b>Online Guideline</b> 线上参会须知 .....	7
<b>Detailed Agenda</b> 详细日程 .....	9
<b>Speakers</b> 报告嘉宾 .....	14

## AGENDA OVERVIEW | 日程概览

\*All schedules will be arranged in **Beijing Time (GMT+8)** 日程时间安排均为**北京时间**

## Day 1 | December 8, 2023-Friday

Time	Event	Room / Tencent ID
10:00-11:00	Test for Speakers & Session Chair 嘉宾和分会主席测试	Tencent Meeting   腾讯会议
10:00-12:00	Online Participants Test 线上参会人员测试	Tencent Meeting   腾讯会议
10:00-17:00	Onsite Registration 线下参会人员领取资料	Hotel Lobby 北京华腾美居酒店会议楼大堂

## Day 2 | December 9, 2023-Saturday

Time	Event	Room / Tencent ID
9:00-11:40	Opening Ceremony & Keynote Speeches   开幕式及专家报告	Creativity+Tencent Meeting 创新厅-3F+腾讯会议
11:40-14:00	Lunch   午餐	Privilege 2-嘉宾 2 厅-嘉宾楼 1F
14:00-17:45	Session 1&4   线下分会 1&4	Creativity   创新厅-会议楼 3F
14:00-18:00	Session 2&5   线下分会 2&5	Cooperation 1   合作 1 厅-会议楼 3F
14:00-15:45	Session 3   线下分会 3	Cooperation 2   合作 2 厅-会议楼 3F
18:00-20:00	Dinner   晚餐	Privilege 1-嘉宾 1 厅-嘉宾楼 1F

## Day 3 | December 10, 2023-Sunday

Time	Event	Room / Tencent ID
10:00-11:45	Session 6   线下分会 6	Cooperation 1   合作 1 厅-会议楼 3F
10:00-11:45	Session 7   线下分会 7	Cooperation 2   合作 2 厅-会议楼 3F
11:45-13:30	Lunch   午餐	Privilege 1-嘉宾 1 厅-嘉宾楼 1F
10:00-12:15	Session A   线上分会 A	668-6527-8590
10:00-12:15	Session B   线上分会 B	371-4663-3757
14:00-16:30	Invited Speech & Session C 特邀报告&线上分会 C	668-6527-8590
14:00-16:00	Session D   线上分会 D	371-4663-3757

## WELCOME | 欢迎辞

Dear distinguished delegates,

Welcome to 2023 7th International Conference on Computer Science and Artificial Intelligence (CSAI 2023) and its workshop The 15th International Conference on Information and Multimedia Technology (ICIMT 2023) which is to be held in Beijing, China during December 8-10, 2023.

CSAI is an annual conference which aim to present the latest research and results of scientists (professors, doctoral students, and post-doc scientists) related to computer science and artificial intelligence topics. The conference provides opportunities for delegates from different areas to exchange new ideas, applications and experiences face to face, to establish business or research relations, and to find global partners for future collaboration. We hope that the conference results in significant contributions to the knowledge base in these scientific fields.

A word of special welcome is given to our keynote and invited speakers who are pleased to make contributions to our conference and share their new research ideas with us. Additionally, our special thanks go to our Conference Chair, Program Chairs, Local Chairs and all the other committee members for their excellent work in securing a substantial input of papers from all over the world and in encouraging participation.

We believe that through this conference, you can get more opportunities for further communication with researchers and practitioners with common interests in this field. With the strong support from all of you, CSAI conference is more distinctive. We wish that all guests can gain benefits from this conference and improve their academic performance. Thank each of you for your efforts to make this conference successful.

We wish all of you will have an unforgettable experience in the conference and hope we could meet face to face next year!

Yours sincerely,  
Conference Committee

## COMMITTEE | 委员会

## Conference Chair

Xiangqun Chen	Peking University, China, Executive director of Beijing Computer Federation	China
---------------	---	-------

## Program Chairs

Eric Jiang	University of San Diego	USA
Yanan Sun	Sichuan University	China
Yan Liu	University of Chinese Academy of Sciences	China
Ran Cheng	Southern University of Science and Technology	China
Shudong Huang	Sichuan University	China

## Local Chairs

Jiangyong Wu	Peking University	China
Junming Wei	Peking University	China

## Steering Committee

Hadi Sutopo	Kalbis Institute	Indonesia
-------------	------------------	-----------

## Publicity Chairs

Wentao Feng	Sichuan University	China
Jizhe Zhou	Sichuan University	China
Xianggen Liu	Sichuan University	China
Mohd Arfian Ismail	Universiti Malaysia Pahang	Malaysia

## International Program Committee

Nikolay Sergeev	Southern Federal University	Russia
Nuno M. Garcia	Universidade da Beira Interior	Portugal
Fairouz Kamareddine	Heriot-Watt University	UK
Agnieszka Jastrzebska	Warsaw University of Technology	Poland

## Venue | 会议地点

**北京华腾美居酒店**  
**Mercure Beijing CBD**

北京朝阳区西大望路甲 16 号院, 近百子湾路口

ADD: No. A-16 Xidawang Road, Chaoyang District, 100124 Beijing, China

订房电话: 15901187612 (王经理)

Reservation Tel: 15901187612 (Miss Wang)

\*Accommodation is not included in the registration fee.

注册费中不包含住宿, 请自行安排住房

**◆ From Beijing Capital International Airport |从北京首都国际机场出发**

By Metro (Around 70 mins): Capital Airport Express→Sanyuanqiao Station (transfer to Line 10) →Shuangjing Station (transfer to Line 7)→Jiulongshan Station Exit B→15-minute Walk

地铁 (大约 70 分钟) : 首都机场线→三元桥站 (转 10 号线) ) →双井站 (转 7 号线) ) →九龙山站 B 口出, 15 分钟步行。

By Taxi (Around 40 mins): Around RMB 65 fare needed

出租车 (大约 40 分钟) : 费用大约 65 元

**◆ From Beijing Daxing International Airport |从北京大兴国际机场出发**

By Metro (Around 80 mins): Daxing Airport Express→Caoqiao Station (transfer to Line 19)→Jingfengmen Station (transfer to Line 14)→Jiulongshan Station Exit B→15-minute Walk

地铁 (大约 80 分钟) : 大兴机场线→草桥站 (转 19 号线) →景风门站 (转 14 号线) →九龙山站 B 口出, 15 分钟步行。

By Taxi (Around 60 mins): Around RMB120 fare needed

出租车 (大约 60 分钟) : 费用大约 120 元





## ONSITE GUIDELINE | 线下参会须知

### ★ Oral Presentation | 口头报告

Regular oral presentation: 15 minutes (including Q&A).

Get your presentation PPT or PDF files prepared. Presentations MUST be uploaded at the session room at least 15 minutes before the session starts.

Laptop (with MS-Office & Adobe Reader), projector & screen, laser pointer will be provided in all oral session rooms.

### ★ Important Notes | 注意事项

Please enter the meeting room at least 15 minutes before your session. Your punctual arrival and active involvement will be highly appreciated.

请至少在会议开始前 15 分钟进入会议室，并积极参与会议各环节。

Please wear your name tag for all the conference activities. Lending it to others is not allowed. If you have any accompanying person, please do inform our staff in advance.

会议期间请佩戴代表证进入会场。请勿将代表证转借给他人。如果您有陪同人员，请提前告知工作人员。

Please keep all your belongings (laptop and camera etc.) at any time. The conference organizer does not assume any responsibility for the loss of personal belongings.

请随身携带贵重物品（笔记本电脑和相机等）。本会议不对个人物品的丢失承担任何责任。

Please show name tag and meal coupons when dining.

就餐时请同时出示代表证与餐券。

## ONLINE GUIDELINE | 线上参会须知

## ★ Time Zone | 时区

The whole program is based on **Beijing Time (GMT+8)**, please check on the program for your own test time and formal presentation time, and then convert it to the local time in your country.

## ★ Platform: Tencent Meeting | 线上会议平台：腾讯会议



Download Link: | 下载链接:

\*<https://voovmeeting.com/download-center.html?from=1001> (Voov Meeting)

\*<https://meeting.tencent.com/download/> (For Chinese Author(s) only)

## ★ Guiline Link | 指导文件下载链接

<https://intl.cloud.tencent.com/document/product/1054?lang=en&pg=>

## ★ Meeting Rooms | 线上会议房间号

**Room A: 668-6527-8590**

**Link:** <https://meeting.tencent.com/dm/3VOtvf01eTDt>

**Room B: 371-4663-3757**

**Link:** <https://meeting.tencent.com/dm/p9NUOJCrOzjV>

## ★ Equipment Needed | 设备及环境需求

\*A computer with internet connection and camera 带有摄像头的电脑设备

\*Headphones 耳机

\*Stable internet connection 稳定的网络连接

\*A quiet place and proper background 安静的环境及合适的背景

## ★ How to use Tencent Meeting | 腾讯会议使用指南

Step 1: Download Tencent Meetings

Step 2: Sign up for an account. (If you cannot sign up, please kindly contact us as soon as possible.)

Step 3: You can set up the languages and do some basic test.

Step 4: How to join the conference online:

1. Open the program, search with your paper ID, find your presentation, you will see there is a meeting ID in each session.
2. Open the Tencent Meeting app, click the join (choose JOIN MEETING), paste the meeting ID in the blank, then you can join the conference.



3. If you don't have an account, you may be required to enter your phone number for verification first.

Step 5: Get familiar with the basic functions: Rename, chat, raise hands, and screen share, etc.

Step 6: On **December 8, 2023**, we will have test session, on that day, we will teach you how to use Tencent Meeting and the functions mentioned above, so please download Tencent Meeting first.

Step 7: Every time you enter the conference or the session, please rename as **SESSION NUMBER+PAPER ID+YOUR NAME**, for example: S1+AI-001+Tom

#### ★ Notes | 注意事项

1. Get your presentation PPT/Video files prepared. To effectively control the time and avoid some unexpected situations, we suggest you send us the recorded video in advance as a backup.
2. Regular oral presentation: 15 minutes (including Q&A). The presentation/video should be within 12 minutes, 3 minutes for Q&A.
3. Your punctual arrival and active involvement in each session will be highly appreciated. Please join in the room at least 15 minutes before your session.
4. CSAI encourages all presenters to make live oral presentations. For technical problems such as network instability, we suggest you email a record video/slide to conference secretary as backup before on **December 5, 2023**.

#### ★ Warm Reminder | 温馨提示

5. Guest speeches will be recorded. Only the host can get permission the record.
6. The video or audio recording(s) may be edited, copied, and/or displayed on the office conference website for public broadcast or for any lawful purpose.
7. Participants will not allow recording other presenters' presentation nor distributing it to or share with anyone unless the presenter gives written consent of agree. If someone failure to do so will be considered a serious academic violation subject to disciplinary/ lawful action.
8. The host totally respect all the presenters' copyright. If you need to record your own presentation, please do inform our host in advance.

## DETAILED AGENDA | 详细日程

\*All schedules will be arranged in **Beijing Time (GMT+8)** 日程时间安排均为北京时间

## Day 1 | December 8-Friday

## Onsite Sign in and Conference Materials Collection

## 线下参会人员领取资料

◇ 10:00-17:00

◇ Location: Lobby of Mercure Beijing CBD (北京华腾美居酒店会议楼大堂)



- Give your Paper ID to the staff.
- 告知工作人员您的文章/听众编号
- Sign your name in the attendance list and check meal information.
- 在签到表签字并反馈用餐信息
- Check your conference kit, which includes conference bag, name tag, meal voucher, conference program, the receipt of the payment, the USB.
- 确保您收集齐以下会议资料：会议包，代表证，餐券，会议日程，发票以及会议 U 盘。

### Guest Speakers & Session Chair Test

#### 报告嘉宾 & 分会主席测试

Time	Presenter	Tencent ID
10:20-10:30	Assoc. Prof. Lei Chen	668-6527-8590
10:30-11:00	Session Chair Test	

### Authors Test for Online Sessions

#### 报告作者测试

Time	Presenter	Tencent ID
10:00-12:00	<b>Session A:</b> AI-019, AI-103, AI-145, AI-190, AI-246, AI2-020, AI2-025, AI2-036, AI-052	371-4663-3757

<b>Session B:</b> AI-016, AI-088, AI-296, AI-1001, AI-121, AI-082, AI-118, AI-214, AI-292
<b>Session C:</b> AI-106, AI-314, AI-154, AI-237, AI-248, AI-294, AI-312, AI-139
<b>Session D:</b> AI-055, AI-073, AI-169, AI-202, AI-166, AI-239, AI-269, AI2-033, AI-257

Day 2 | December 9-Saturday

## Opening Ceremony & Guest Speeches | 开幕式及专家报告

Creativity | 创新厅-会议楼 3F

Room A: 668-6527-8590

Link: <https://meeting.tencent.com/dm/3VOtvf01eTDt>



Time	Event	Presenter
<b>Chaired by</b>		
09:00-09:10	Opening Remarks	<b>Prof. Xiangqun Chen</b> , Peking University, China 陈向群教授, 北京大学
09:10-09:50	Keynote Speech I	<b>Prof. Wei Lu</b> , University of Michigan, USA Lu We 教授, 美国密西根大学 <i>Title: Integrating Machine Learning with Human Knowledge</i>
09:50-10:30	Keynote Speech II	<b>Prof. Dazi Li</b> , Beijing University of Chemical Technology, China 李大字教授, 北京化工大学
10:30-11:00	<b>Coffee Break &amp; Group Photo</b>	
11:00-11:40	Keynote Speech III	<b>Prof. Wei Fang</b> , Jiangnan University, China 方伟教授, 江南大学

11:40-14:00	<b>Lunch   Privilege 2-嘉宾 2 厅-嘉宾楼 1F</b>	
Time	Venue	Event
14:00-15:30	Creativity 创新厅-会议 楼 3F	<b>Session 1: Digital Image Analysis and Processing Methods   数字图像分析与处理方法</b>
		AI-025, AI-142, AI-193, AI-297, AI2-012, AI-266
14:00-15:30	Cooperation 1 合作 1 厅-会议 楼 3F	<b>Session 2: Information Network and Signal Analysis   信息化网络与信号分析</b>
		AI2-037, AI-175, AI-091, AI-187, AI-229, AI-290
14:00-15:45	Cooperation 2 合作 2 厅-会议 楼 3F	<b>Session 3: Data Structure Analysis and Intelligent Algorithm Design 数据结构分析与智能算法设计</b>
		AI-079, AI-136, AI-217, AI-295, AI-085, AI-263, AI-305
15:30-16:15	<b>Coffee Break</b>	
16:15-17:45	Creativity 创新厅-会议 楼 3F	<b>Session 4: Image-based Visualization Data and Education   移动增强现实-增强维修培训</b>
		AI-220, AI-278, AI2-034, AI-276, AI-061, AI-031, AI-163
16:15-18:00	Cooperation 1 合作 1 厅-会议 楼 3F	<b>Session 5: Electronic Collaborative Control and Electrical System Based on Swarm Intelligence   基于群智能的电子协同控制与电气系统</b>
		AI-070, AI-178, AI-127, AI-115, AI-043, AI-285
18:00-20:00	<b>Dinner-Privilege 1-嘉宾 1 厅-嘉宾楼 1F</b>	

## Day 3 | December 10-Sunday

## Onsite Sessions | 线下分会



Time	Venue	Event
10:00-11:45	Cooperation 1 合作 1 厅-会议 楼 3F	<b>Session 6:</b> Information Systems and Management Based on Machine Learning   基于机器学习的信息系统与管理 AI-157, AI-233, AI-058, AI-022, AI-028, AI-251, AI-181-A
10:00-11:45	Cooperation 2 合作 2 厅-会议 楼 3F	<b>Session 7:</b> Artificial Intelligence and Potential Applications   人工智能及潜在应用 AI-1005-A, AI-006, AI-049, AI-253, AI-076, AI-148, AI-208
12:00-13:30	Lunch- Privilege 1-嘉宾 1 厅-嘉宾楼 1F	

## Online Sessions | 线上分会



Time	Tencent ID	Event
10:00-12:15	668-6527-8590	<b>Session A:</b> Data -based Information Management and Service Platform Development   基于数据驱动的信息管理及服务平台开发 AI-019, AI-103, AI-145, AI-190, AI-246, AI2-020, AI2-025, AI2-036, AI-052
10:00-12:15	371-4663-3757	<b>Session B:</b> Data Model Analysis and Management   数据模型分析与 管理 AI-016, AI-088, AI-296, AI-1001, AI-121, AI-082, AI-118, AI-214, AI-292
14:00-14:30	668-6527-8590	Invite Speech <b>Assoc. Prof. Lei Chen</b> , Shandong University, China 陈雷副教授, 山东大学 <i>Title: Perceptual image quality assessment based on human visual system</i>
14:30-16:30		<b>Session C:</b> Image Detection and Recognition   图像检测及识别 AI-106, AI-314, AI-154, AI-237, AI-248, AI-294, AI-312, AI-139

14:00-16:15	371-4663-3757	<b>Session D: Modern Information Security Theory and Key Technologies   现代信息安全理论及关键技术</b> AI-055, AI-073, AI-169, AI-202, AI-166, AI-239, AI-269, AI2-033, AI-257
-------------	---------------	--



## SPEAKER | 报告嘉宾

<b>Beijing Time</b>	09:10-09:50 on Dec.9	<b>Venue</b>	Creativity-创新厅-会议楼 3F
<b>Tencent ID</b>	668-6527-8590	<b>Link</b>	<a href="https://meeting.tencent.com/dm/3VOtvf01eTDt">https://meeting.tencent.com/dm/3VOtvf01eTDt</a>



## Prof. Wei Lu

University of Michigan, USA

Fellow of ASME

Lu Wei 教授，美国密西根大学

### BIO

Wei Lu is a Full Professor at the Department of Mechanical Engineering, University of Michigan-Ann Arbor. He received his B.S. from Tsinghua University and a Ph.D. from Princeton University. Prof. Lu uses machine learning to address major challenges in energy and other applications. He has more than 180 journal publications in high impact peer-reviewed journals and 200 presentations and invited talks in international conferences, universities and national labs including Harvard, MIT and Stanford. He also has plenty of publications in conference proceedings, encyclopedias and book chapters. Prof. Lu was the recipient of many awards including the CAREER award by the US National Science Foundation; the Robert J. McGrattan Award by the American Society of Mechanical Engineers; Elected Fellow of the American Society of Mechanical Engineers; Robert M. Caddell Memorial Research Achievement Award; Faculty Recognition Award; Department Achievement Award; Novelis/CoE Distinguished Professor Award; CoE Ted Kennedy Family Faculty Team Excellence Award; CoE Creative, Innovative, Daring Award; CoE George J. Huebner, Jr. Research Excellence Award; and the Gustus L Larson Memorial Award by American Society of Mechanical Engineers. He was recognized as academics in the top 2% in the discipline of energy (a study from Stanford University science-wide author databases of standardized citation indicators and top 2% is the highest in the study). He was invited to the National Academies Keck Futures Initiative Conference multiple times.

### ABSTRACT

#### Integrating Machine Learning with Human Knowledge

Machine learning has been heavily researched and widely used in many disciplines. However,



achieving high accuracy requires a large amount of data that is sometimes difficult, expensive, or impractical to obtain. Integrating human knowledge into machine learning can significantly reduce data requirement, increase reliability and robustness of machine learning, and build explainable machine learning systems. This allows leveraging the vast amount of human knowledge and capability of machine learning to achieve functions and performance not available before and will facilitate the interaction between human beings and machine learning systems, making machine learning decisions understandable to humans. In this talk I will present some of our work in these areas, including self-directed online machine learning for topology optimization [1], which reduced the computational time by 5 orders of magnitude and outperformed all state-of-the-art algorithms tested, enabling design optimizations not possible before, integrating machine learning with human knowledge [2], machine learning toward advanced energy storage devices and systems [3], and application of machine learning for medical applications.

1. C. Deng, Y. Wang, C. Qin, Y. Fu, and W. Lu, “Self-directed online machine learning for topology optimization,” *Nature Communications*, 13, 388, 2022.
2. C. Deng, X. Ji, C. Rainey, J. Zhang, and W. Lu, “Integrating machine learning with human knowledge,” *iScience*, 23, 101656, 2020.
3. T. Gao and W. Lu, “Machine learning toward advanced energy storage devices and systems,” *iScience*, 24, 101936, 2021.

## SPEAKER | 报告嘉宾

**Beijing Time** 09:50-10:30 on Dec.9**Venue** Creativity-创新厅-会议楼 3F**Tencent ID** 668-6527-8590**Link** <https://meeting.tencent.com/dm/3VOtf01eTDt>**Prof. Dazi Li**

Beijing University of Chemical Technology, China

李大字教授，北京化工大学

**BIO**

Li Dazi is the Vice Dean of Teaching, Professor, Doctoral Supervisor of the School of Information Science and Technology at Beijing University of Chemical Technology. She is also the head of the national first-class undergraduate program "Automation" and a renowned teaching teacher in Beijing. She went to Japan to study abroad in 2000 and graduated from the Department of Information Science, Kyushu University in Japan with a Ph.D. in Electrical and Electronic Systems in 2004. The main research areas are machine learning and artificial intelligence, advanced control, complex system modeling and optimization, fractional order systems, etc.

**ABSTRACT**

## SPEAKER | 报告嘉宾

**Beijing Time** 11:00-11:40 on Dec.9**Venue** Creativity-创新厅-会议楼 3F**Tencent ID** 668-6527-8590**Link** <https://meeting.tencent.com/dm/3VOtvf01eTDt>

## Prof. Wei Fang

Jiangnan University, China

方伟教授，江南大学

### BIO

Wei Fang received a doctoral degree in March 2008. From April 2013 to April 2014, he went to Professor Xin Yao's research group (CERCIA) at the University of Birmingham in the UK for a one-year academic visit. His main research interests include intelligent optimization theory, methods, and applications, intelligent optimization techniques in machine learning, big data analysis, complex production process modeling, optimization, and scheduling.

### ABSTRACT

## SPEAKER | 报告嘉宾

**Beijing Time** 14:00-14:30 on Dec.10**Tencent ID** 668-6527-8590**Link** <https://meeting.tencent.com/dm/3VOtvf01eTDt>**Assoc. Prof. Lei Chen**

Shandong University, China

陈雷副教授，山东大学

**BIO**

Lei Chen received the B.Sc. and M.Sc. degrees in electrical engineering from Shandong University, Jinan, China, and the Ph.D. degree in electrical and computer engineering from University of Ottawa, Ontario, Canada. He is currently an Associate Professor with the School of Information Science and Engineering, Shandong University, China. His research interests include image processing and computer vision, visual quality assessment and pattern recognition, machine learning and artificial intelligence. He was the principal investigator of projects granted from the National Natural Science Foundation of China, National Natural Science Foundation of Shandong Province, China Postdoctoral Science Foundation, etc. He has published more than 40 papers on top international journals and conferences in recent years including IEEE TIP, Signal Process., ICME, etc. He was awarded the Future Plan for Young Scholars of Shandong University. He served for many international conferences including the ICIGP 2021, CSAI2022, MLCCIM2022, and ICIVC 2023 as Program Chair, Technical Chair or Publicity Chair.

**ABSTRACT****Perceptual image quality assessment based on human visual system**

With the rapid development of modern technology, people have higher expectations for the visual effects of images. The reference-less image quality assessment method guided by the human visual system is more in line with the way humans perceive the world. In order to address the ill-posed nature of two-dimensional no reference image quality assessment and make it closer to the performance of full reference or reduced reference image quality assessment, we will report a NR-IQA method based on non-adversarial visual restoration networks. Moreover, we will report our method of combining binocular visual saliency weighting in the assessment of stereoscopic image quality. This method combines the 2D saliency map of a stereo image with



the depth saliency map of the left and right views in a linearly weighted manner to obtain a 3D saliency map and assigns weights based on the 3D saliency information to obtain the final prediction score. The performance of the proposed method has been evaluated on various widely-used databases. The experimental results demonstrate the effectiveness and superiority of our proposed method compared to other related methods.