

# The 5<sup>th</sup> International Conference on Culture-oriented Science & Technology, 2024

## Conference Schedule

Time: 2024.8.25—8.28

Venue: Academic Center, Building 2, Communication University of China (CUC)

No.1 Dingfuzhuang East Street, Chaoyang District, Beijing, China

Date	Arrange
8.25	Registration Time: 14:00—18:00 Venue: Academic Center, Building 2, Communication University of China
8.26	Plenary session Time: 9:00—12:00 Venue: Academic Center, Building 2, Communication University of China 1. Opening Ceremony; 2. Photography; 3. Keynote Speech
	Parallel Sessions Time: 13:30—17:30 Venue: Academic Center, Building 2, Communication University of China
8.27	Parallel Sessions Time: 9:00—12:30 Venue: Academic Center, Building 2, Communication University of China
	Discussion and communication
8.28	Academic investigation

**Time: 9:00-12:00, August 26**

**Venue: Academic Center, Building 2, Communication University of China**

9:00-9:10	Opening
9:10-9:40	Speech by the President of the Conference
9:40-10:00	Photography
10:00-10:30	Keynote Speech 1 Title: Technology enables large-scale deacidification protection and inheritance of paper documents Speaker: Jinping Zhang, Nanjing Museum
10:30-11:00	Keynote Speech 2 Title: Two Case Studies on AI+VR Technology for Chinese Traditional Culture Dissemination Speaker: Yong-Jin Liu, Tsinghua University
11:00-11:30	Keynote Speech 3 Title: Key technologies and applications of image and video quality enhancement and evaluation Speaker: Huiyuan Fu, Beijing University of Posts and Telecommunications
11:30-12:00	Keynote Speech 4 Title: To be confirmed Speaker: Cheng Jin, Fudan University

**Time: 13:30-17:30, August 26**

**Venue: Room V08, Academic Center, Building 2, CUC**

<b>Parallel Session 1</b>	
13:30-13:45	<b>Title:</b> Dissemination of Intangible Cultural Heritage Based on Digital Twin Technology <b>Authors:</b> Yu Wen, Kexin Xu
13:45-14:00	<b>Title:</b> A Camera Robot Pose Converter Based on Embedded System <b>Authors:</b> Jingjie He, Pu Wang, Jing Mi
14:00-14:15	<b>Title:</b> Dunhuang murals image inpainting method based on fusion classification pre-training model <b>Authors:</b> Hui Ren, Chengya Zhang, Ke Sun, Chenyu Ye
14:15-14:30	<b>Title:</b> Evaluation of Service Capability of Cultural Product Property Rights Trading Platform in the Context of Blockchain <b>Authors:</b> Xin Wu, Cuifen Yang, Yuan Ni
14:30-14:45	<b>Title:</b> Analysis of education reform in Indonesia based on qualitative methods for a digital sustainable society <b>Authors:</b> Khodir Muhammad, Zhe Li
14:45-15:00	<b>Title:</b> The Application of VR/AR Technology in Enhancing the Emotional Experiences of College Students in ACG Exhibition Tourism <b>Authors:</b> Yige Gao, Yi Yu
15:00-15:15	<b>Title:</b> Pattern-based Stylization Method for QR Codes <b>Authors:</b> Ruihan Lei, Yu Yang
15:15-15:30	<b>Title:</b> Research on the Identification and Management of User Risk Perception Dimensions in Blockchain Technology-based Cultural Product Rights Confirmation Services <b>Authors:</b> Jinhe Pan, Cuifen Yang, Yuan Ni
15:30-15:45	<b>Title:</b> Design and Implementation of Blockchain-based Image Copyright Confirmation System <b>Authors:</b> Minglu Xu, Fang Meng
15:45-16:00	<b>Title:</b> Human Reliability Analysis of Professional Theater Based on CREAM <b>Authors:</b> Huiqin Wang, Huiqi Wang, Hui Ren
16:00-16:15	<b>Title:</b> Fault Prediction Method of Stage Lifts Based on Digital Twin <b>Authors:</b> Huiqin Wang, Chunxi Zhang, Zhen Li, Mengjiao Xiao
16:15-16:30	<b>Title:</b> Source Separation of Piano Concertos Using Hybrid LSTM-Transformer Model <b>Authors:</b> JingYu Liu, Wei He, Jingjing Zhou, Wei Jiang
16:30-16:45	<b>Title:</b> An Acoustic Dataset Construction Method of Chinese National Musical Instrument Guqin <b>Authors:</b> Jingyu Liu, Chen Yang, Zijin Li, Wei Jiang
16:45-17:00	<b>Title:</b> Deep Learning Based Public Opinion Analysis of Game Communication <b>Authors:</b> Jinbao Song, Da Chen, Chuanyu Xiang
17:00-17:15	<b>Title:</b> New forms of encryption art creation and reception in the context of virtual digital from the perspective of metauniverse <b>Authors:</b> Tianyi Fan

**Time: 13:30-17:30, August 26**

**Venue: Room V06, Academic Center, Building 2, CUC**

<b>Parallel Session 2</b>	
13:30-13:45	<b>Title:</b> Association Between Timbre Perception Features and Fine-Grained Emotions in Film and Television Music <b>Authors:</b> Xiaomeng Ren, Zhibin Su, Wei Jiang, Jingyu Liu
13:45-14:00	<b>Title:</b> Research on Comfort Perception and Evaluation of Immersive Experience Equipment in Cultural Tourism <b>Authors:</b> Huibo Hu, Zhibin Su, Yujian Jiang, Lingxi Qu
14:00-14:15	<b>Title:</b> Explore the application of oil paper umbrella elements in smart lighting fixtures <b>Authors:</b> Yuyan Li, Juan Qiao, Wenwen Ning, Xiaonan Guo, Yuhe Yi, Lei Zhang
14:15-14:30	<b>Title:</b> The analysis on speaker timbre perception and acoustic parameters under whispered speech <b>Authors:</b> Yali Liu, Liujiachao Peng, Jingying Zhang, Zhijun Zhao, Yujun Wang
14:30-14:45	<b>Title:</b> AIGC-assisted geospatial generative design for classical Chinese literary works <b>Authors:</b> Peipeng Ma, Jinhua Dou, Jiayi Jia, Xinrong Ma
14:45-15:00	<b>Title:</b> A study on analyzing the differences in the characteristics of user comments on cultural short video platforms <b>Authors:</b> Nuan Luo, Qian Cao, Jian Zhang
15:00-15:15	<b>Title:</b> Design of comprehensive evaluation model for pre-service teachers' Five-dimensional education based on machine learning <b>Authors:</b> Dan Sun, Xiaoyong Lu, Yimin He, Yuqing Qiu
15:15-15:30	<b>Title:</b> Multipath planning based on multimodal optimization slime mold algorithm <b>Authors:</b> Luli Gao, Hui Ren
15:30-15:45	<b>Title:</b> Artistic reconstruction of images and videos using multiple elements based on optimization algorithms <b>Authors:</b> Chengcheng Zheng, Boqin Ma
15:45-16:00	<b>Title:</b> Innovation within tradition: Exploring digital interventions in transmitting traditional lantern making <b>Authors:</b> Yuxiang Fan, Wanlin Zhang
16:00-16:15	<b>Title:</b> Traditional Pattern Segmentation Algorithm Based on Semantic Prediction and Region Learning <b>Authors:</b> Xiaogang Hou, Haiying Zhao, Xiangbing Zhou, etc.
16:15-16:30	<b>Title:</b> The Impact of Multisensory Experience with Hotel Images on Sales <b>Authors:</b> Haoqiang Sun, Haozhe Xu, Shaolong Sun, etc.
16:30-16:45	<b>Title:</b> A Cross-Domain Latent Topic Model for Item Tagging and Recommendation Systems <b>Authors:</b> Rui Tang, Cheng Yang
16:45-17:00	<b>Title:</b> Analysis of Influence Degree of Fear Based on Different Musical Characteristics <b>Authors:</b> Muzi Li, Zheng Long Lee, Yee Shan Kua, etc.
17:00-17:15	<b>Title:</b> A novel multifunctional industrial product design scheme using modular design <b>Authors:</b> Nuo Pang, Mustaffa Halabi Azahari, Lili Chen, Zhenqi Li

**Time: 13:30-17:30, August 26, Venue: Room V04, Academic Center, Building 2,  
CUC Tencent Meeting: 476-443-361**

<b>Parallel Session 3</b>	
13:30-13:45	<b>Title:</b> An analysis of factors influencing the language style of CCTV Spring Festival Gala hosts <b>Authors:</b> Yujie Zhao
13:45-14:00	<b>Title:</b> Content Analysis of the Self-Presentation of Silver Influencers on Douyin Platform <b>Authors:</b> Linfang Qiu, Xin Wang
14:00-14:15	<b>Title:</b> Research on the Application of Anti-tampering Technology in Digital Cultural Communication <b>Authors:</b> Xiaolong Mo, Huabiao Li, Ruiwei Meng
14:15-14:30	<b>Title:</b> Experiment Design for Investigating the Effectiveness of Accelerated Video Learning Based on Brain Imaging Evidence <b>Authors:</b> Yuqing Qiu, Xiaoyong Lu, Dan Sun, Yimin He
14:30-14:45	<b>Title:</b> A Novel Multi-modal Recommender with Modality-Specific Graph Refining Strategy <b>Authors:</b> Peng Yi, Zhaoxian Li, Lu Chen, Yunfei Liang, etc.
14:45-15:00	<b>Title:</b> An End-to-end Audiovisual Program Translation System for Multiple Languages <b>Authors:</b> Yue Zhu, Yonghua Li, Zhongle Wu, Ruoyan Jing, Hongyuan Zhang, Kaichao Zhan, Mingyue Yu
15:00-15:15	<b>Title:</b> Exploration of Trusted Sharing Mode and Technical Practice of Digital Cultural Resources in Museums <b>Authors:</b> Linxian Hao, Huabiao Li, Qianwei Huang
15:15-15:30	<b>Title:</b> Visual analysis of creativity of university students' entrepreneurial team based on leadership style <b>Authors:</b> Lian Chen, Jingwen Wang
15:30-15:45	<b>Title:</b> A Singing Formant Extraction Method Based on Peak Fitting <b>Authors:</b> Jingyu Liu, Jiawei Wu, Wei Jiang
15:45-16:00	<b>Title:</b> A generative approach to image generation of Yao Long Drums based on Cultural Gene analysis <b>Authors:</b> Ming Xu, ZhiSheng Xin, YiChun Tan
16:00-16:15	<b>Title:</b> A Chinese Font Generation Method based on Dynamic Convolution Improved Generative Adversarial Network <b>Authors:</b> Xuefei Guo, Li Zhao, Xiaojun Wu, Honghong Yang, etc.
16:15-16:30	<b>Title:</b> Study on Public Participation in Urban Water Environment Treatment Service System Design <b>Authors:</b> Jifeng Xu, Mengyao Xiao, Tian Fang
16:30-16:45	<b>Title:</b> Optimization and application of reverberation sampling scheme in music recording <b>Authors:</b> Penghao Ren, Yilong Zhang
16:45-17:00	<b>Title:</b> Innovative Research and Application of Minnan Concrete Bricks Patterns Based on Image Processing <b>Authors:</b> Min Wang, Ziyue Xiao, Xinran Liu
17:00-17:15	<b>Title:</b> A novel design scheme of small intelligent fire extinguisher based on unconscious design method <b>Authors:</b> Boran Zhang, Jing Cao

**Time: 9:00-12:30, August 27, Tencent Meeting: 438-862-042**

<b>Parallel Session 4</b>	
9:00-9:15	<p><b>Title:</b> Integration of game flow and UE4 engine to improve immersive experiences in FPS E-sports game  <b>Authors:</b> Guanchu Xu, Wenjing Lu, Xueru Zhang</p>
9:15-9:30	<p><b>Title:</b> Application of Quality Function Deployment and Function-Behavior-Structure Model in the Innovative Design of Hospital Guide Robot  <b>Authors:</b> Yixiao Guo, Jifeng Xu</p>
9:30-9:45	<p><b>Title:</b> Evaluation Experiment on the Listening Experience of Classical Music with Varying Reverberation: A Case Study of Piano Music  <b>Authors:</b> Nan Gao, Yuejia Luo</p>
9:45-10:00	<p><b>Title:</b> Analysis of the Correlation between Venue Display and Tourists' Place Attachment in Revolutionary Tourist Attractions  <b>Authors:</b> Yi Yu, Huan Zhang</p>
10:00-10:15	<p><b>Title:</b> Detection and System Implementation of Abnormal Audio Events in Urban Environments Based on Convolutional Neural Networks  <b>Authors:</b> Shutong Xiao, Ling Lei</p>
10:15-10:30	<p><b>Title:</b> A Framework for Image Text Retrieval Based on Large Language Model  <b>Authors:</b> Jianwen Liao, Yangchen Wang, Yingyun Yang</p>
10:30-10:45	<p><b>Title:</b> Design of Fire Alarm Devices for Wooden-Structured Ancient Buildings Based on Service Design  <b>Authors:</b> Shuofeng Liu, Yuanyang Tu, Hongyan Wu, Lei Xue</p>
10:45-11:00	<p><b>Title:</b> Vitality Evaluation and Enhancement Strategies of Wuzhou Historical and Cultural Districts Based on Semantic Differential Method  <b>Authors:</b> Haifeng Chu, Xiang Shi, Jing Tang</p>
11:00-11:15	<p><b>Title:</b> Implementation of social media analysis system based on database technology  <b>Authors:</b> Xiaoyue Wang, Xinran Ba</p>
11:15-11:30	<p><b>Title:</b> Development Strategies for Integrating Rural Culture and Tourism in Liaoning Province: A Three Integration and Five Systems Approach  <b>Authors:</b> Lin Lin, Xinyu Zhao, Zhongzheng Lyu</p>
11:30-11:45	<p><b>Title:</b> Analysis and Application of Yi Embroidery Color Characteristics Based on K-Means Clustering  <b>Authors:</b> Xinjia Wang, Wei Zhou, Jifeng Xu</p>
11:45-12:00	<p><b>Title:</b> TFSWA-UNet: Temporal-Frequency and Shifted Window Attention Based UNet For Music Source Separation  <b>Authors:</b> Zhenyu Yao, Yuping Su, Honghong Yang, Xiaojun Wu, Yumei Zhang</p>
12:00-12:15	<p><b>Title:</b> A Scoping Review Focusing on the Competencies Developed by Head-Mounted Display Virtual Reality in School Education  <b>Authors:</b> Hidemichi Okamoto, Tetsushi Kawasaki, Mutfried Hartmann, Frank Thissen</p>
12:15-12:30	<p><b>Title:</b> Design and performance analysis of soft manipulator based on fast Pneumatic network technology  <b>Authors:</b> Linlin Ge</p>

**Time: 9:00-12:30, August 27**

**Tencent Meeting: 974-326-792**

<b>Parallel Session 5</b>	
9:00-9:15	<b>Title:</b> Analysis of Tourist Consumption Behavior in “Social Media Hotspot” Cities Based on User-Generated Content: A Case Study of Xi’an <b>Authors:</b> Cai Wen Zhao, Huan Zhang
9:15-9:30	<b>Title:</b> Improved Design of SOR Model Based on Virtual Tourism User-generated Content and Destination Attachment <b>Authors:</b> Bowen Guan
9:30-9:45	<b>Title:</b> RR-WebRTC: Efficient Real-Time Communications With Fast Loss Recovery For WebRTC <b>Authors:</b> Dongcheng Luo, Yuan Zhang, Jinyao Yan
9:45-10:00	<b>Title:</b> Design of Early Childhood Education Mobile Social Applications Based on the KJ-Kano Model <b>Authors:</b> Juan Li, Jiayue Liu, Jiaxuan Zhang, Leyi Hong, Qi Tian
10:00-10:15	<b>Title:</b> Research On Destination Tourism Data Based on CNN-BiLSTM and STL-LSTM Methods for Data Continuity Problem <b>Authors:</b> Zhengguang Lei, Wenqing Zhao, Caihong Li, Yi Yang, Xingbao Wei
10:15-10:30	<b>Title:</b> Design of a Computing Power Token Trading Platform for Government Applications <b>Authors:</b> Ziyu Jiang
10:30-10:45	<b>Title:</b> The Impact of Platform Varieties on Emoji Usage: Based on Mixed Research Methods <b>Authors:</b> Xingyue Bai, Liqun Liu, Wei Lv
10:45-11:00	<b>Title:</b> Influencing factors of native advertising avoidance based on interactive media <b>Authors:</b> Ziyu Mao, Liqun Liu, Zhixiang Fang
11:00-11:15	<b>Title:</b> Media synergy and emotional effects: an analysis of blockchain technology communication in China <b>Authors:</b> Cunqi Han, Liqun Liu, Guowei Li
11:15-11:30	<b>Title:</b> A novel design method of Tujia brocade patterns under semantics of expandability <b>Authors:</b> Xinyi Cheng, Yue Mi
11:30-11:45	<b>Title:</b> Analysis of VOT Acoustic Parameters of Stops and Affricates in Mandarin for Adolescents <b>Authors:</b> Jing An, Chao Gao
11:45-12:00	<b>Title:</b> Compressing DNN-based Image/Video Watermarking Models for Resource-Constrained Devices <b>Authors:</b> Jianlin Li, Guanhui Ye, Yuchen Wang, Shiyao Zhang, Xuetao Wei
12:00-12:15	<b>Title:</b> CDFD: A Novel Cross-modal Dynamic Fusion and Self-distillation Approach in Fake News Detection <b>Authors:</b> Liu Weidong, Wu Peng, Qin Beibei
12:15-12:30	<b>Title:</b> Intelligent product design methods and typical applications simulating animal ecology <b>Authors:</b> Yongmin Wang, Nuo Pang

**Time: 9:00-12:30, August 27**

**Tencent Meeting: 885-625-110**

<b>Parallel Session 6</b>	
9:00-9:15	<b>Title:</b> Exploratory practice in digital theatre: definitions, classifications, production logic, and challenges <b>Authors:</b> Ming Ma, Yuping Kang, Yajiao Cai
9:15-9:30	<b>Title:</b> Residential Space Design for the Multi-Generation Cohabitation Based on Environment-Behavior Studies <b>Authors:</b> Xinchang Ouyang, Jifeng Xu
9:30-9:45	<b>Title:</b> LLM-based user requirement analysis and intelligent Q&A toward Chang'an Twelve Hours <b>Authors:</b> Fuqing Hou, Yibing Chen, Xin Shi, Min Li, Xueqing Zhao
9:45-10:00	<b>Title:</b> Piano Concerto Source Separation Based on Speech Separation and Channel Attention <b>Authors:</b> Jingyu Liu, Jingjing Zhou, Xinyan He, Wei He
10:00-10:15	<b>Title:</b> The News Delivery Channel Recommendation Based on Granular Neural Network <b>Authors:</b> Xiujun Bai, Ying Miao, Lin Wu, Yuhao Long
10:15-10:30	<b>Title:</b> The construction of the museum audience data system based on big data technology <b>Authors:</b> Menglong Chang
10:30-10:45	<b>Title:</b> Research on Named Entity Recognition for Oral History Text <b>Authors:</b> Chaoyu Hu, Shilei Bai, Mengfei Zhang
10:45-11:00	<b>Title:</b> Architectural Color Image Scale Computing of Beijing Forbidden City <b>Authors:</b> Bowen Liu, Wenli Huang, Xiumeng Yu, Zongliu Ma, Ziyi Guo, Shuang Wang, Wei Jiang
11:00-11:15	<b>Title:</b> Semantic Analysis and Modeling of the Color of Stage Costume – A Case Study of “The Painting Journey” <b>Authors:</b> Wenli Huang, Bowen Liu, Fang Sun, Shuang Wang
11:15-11:30	<b>Title:</b> Research On Tourist Destination Passenger Flow Prediction Based On Decomposition Clustering Technology For Data Continuity Problem <b>Authors:</b> Lianze Feng, Lin Mu, Yi Yang, Caihong Li
11:30-11:45	<b>Title:</b> A Social Network Analysis of Musician Co-creation on Digital Platform <b>Authors:</b> Manlin Wang, Ting Jiang
11:45-12:00	<b>Title:</b> Self-presentation of Housewives in Social Media: A Case Study of Tik Tok <b>Authors:</b> Wei Lv, Zihao Wang, Desheng Lan
12:00-12:15	<b>Title:</b> Innovative application of intangible cultural heritage elements of shadow play in digital field design <b>Authors:</b> Jing Cao