

2023 International Conference on Intelligent Perception and Computer Vision (CIPCV 2023)

**Xi'an, China
19-21 May 2023**



**IEEE Catalog Number: CFP23FZ4-POD
ISBN: 979-8-3503-2339-9**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP23FZ4-POD
ISBN (Print-On-Demand):	979-8-3503-2339-9
ISBN (Online):	979-8-3503-2338-2

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2023 International Conference on Intelligent Perception and Computer Vision (CIPCV) **CIPCV 2023**

Table of Contents

Message from General Chairs	vii
Conference Organization	viii
Program Committee	ix
Reviewers	x

CIPCV 2023

Research on Semantic Segmentation Based on Improved PSPNet	1
<i>Chenyu Zhang (University of Science and Technology Liaoning, China), Ji Zhao (University of Science and Technology Liaoning, China), and Yuxiang Feng (Beijing Kedong Electric Power Control System Co., Ltd, China)</i>	
Efficient and High-Performance Cigarette Appearance Detection Based on YOLOv5	7
<i>Yong Peng (Yunnan University of Finance and Economics, China), Dan Jiang (Yunnan University of Finance and Economics, China), Xianzhou Lv (Hongyun Honghe Tobacco (Group) Coable, China), and Yingbo Liu (Yunnan University of Finance and Economics, China)</i>	
Feature Chirality in Deep Learning Models	13
<i>Shipeng Ji (Army Engineering University of PLA, China), Yang Li (Army Engineering University of PLA, China), Ruizhi Fu (No. 32316 Units of PLA, China), Jiabao Wang (Army Engineering University of PLA, China), and Zhuang Miao (Army Engineering University of PLA, China)</i>	
Re-Parameterized Global Channel Interaction Attention Module for Convolutional Neural Networks	19
<i>Yincong Wang (Anhui University, China), Shoubiao Tan (Anhui University, China), and Chunyu Peng (Anhui University, China)</i>	
A Health Diagnosis System Based on Transfer Learning and Multi-Scale Dilated Convolution from Binocular Fundus Image Pairs	27
<i>Dongsheng Zhu (Fudan University, China), Aiming Ge (Fudan University, China), Xindi Chen (Fudan University, China), Shuo Liu (Fudan University, China), Qiuyang Wang (Fudan University, China), and Jiangbo Wu (Fudan University, China)</i>	

3D Human Reconstruction from A Single Depth Image	33
<i>Rihui Li (Zhejiang University; Zhejiang Provincial Key Laboratory of Information Processing, Communication and Networking, China), Dongxiao Li (Zhejiang University; Zhejiang Provincial Key Laboratory of Information Processing, Communication and Networking, China), and Ming Zhang (Zhejiang University; Zhejiang Provincial Key Laboratory of Information Processing, Communication and Networking, China)</i>	
A ConvNet Structure Learning Spatiotemporal Features for Gesture Recognition	40
<i>Guishuang Fan (Harbin Institute of Technology, China), Shidong Jin (Harbin Institute of Technology, China), Fei Wang (Harbin Institute of Technology, China), and Dan Yan (Wuhan University of Technology, China)</i>	
Handwritten Chinese Character Recognition Based on Morphology and Transfer Learning	47
<i>Pingping Shi (Hohai University, China), Yuansheng Lou (Hohai University, China), and Rui Xia (Nanjing University of Aeronautics and Astronautics, China)</i>	
Acoustic Analysis of Vowels in Kokborok for Male and Female Native Speakers of Tripura	52
<i>Suman Debbarma (Tripura University (A Central University), India) and Swanirbhar Majumder (Tripura University (A Central University), India)</i>	
Chatbot in Smartphone Self-paced Learning: A Study on Technology Acceptance among Older Adults in Malaysia	57
<i>Min Hooi Yong (University of Bradford, UK), Zhi Shan Lim (Sunway University, Malaysia), and Yunli Lee (Sunway University, Malaysia)</i>	
Application of Data Mining in Depth Analysis of Drug Use	63
<i>Xiang Nan (NanTong Normal College, China) and Yueyue Zhu (Affiliated Hospital 2 of Nantong University; First People's Hospital of Nantong City, People's Republic of China)</i>	
Underwater Image Dehazing using Non-Local Prior Method and Air-Light Estimation	68
<i>Ayush Dogra (Chitkara University, India), Bhawna Goyal (Chandigarh University, India), Dawa Chyophel Lepcha (Chandigarh University, India), and Vinay Kukreja (Chitkara University, India)</i>	
Unmanned Ship Ranging and Error Correction Method Based on Monocular Vision	74
<i>Gangqiang Wang (Dalian Maritime University, China) and Jin Huang (Dalian Maritime University, China)</i>	
Author Index	79