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Front Matter: Volume 11429

, "Front Matter: Volume 11429," Proc. SPIE 11429, MIPPR 2019: Automatic Target Recognition and Navigation, 1142901 (14 February 2020); doi: 10.1117/12.2565804

SPIE.

Event: Eleventh International Symposium on Multispectral Image Processing and Pattern Recognition (MIPPR2019), 2019, Wuhan, China

PROCEEDINGS OF SPIE

MIPPR 2019: Automatic Target Recognition and Navigation

Jianguo Liu
Hanyu Hong
Xia Hua
Editors

2–3 November 2019
Wuhan, China

Organized by
Huazhong University of Science and Technology (China)
National Key Laboratory of Science and Technology on Multi-spectral Information Processing
(China)
Wuhan Institute of Technology (China)

Sponsored by
National Key Laboratory of Science and Technology on Multi-spectral Information Processing
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Huazhong University of Science and Technology (China)
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Published by
SPIE

Volume 11429

Proceedings of SPIE 0277-786X, V. 11429

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

MIPPR 2019: Automatic Target Recognition and Navigation, edited by Jianguo Liu, Hanyu Hong, Xia Hua,
Proc. of SPIE Vol. 11429, 1142901 · © 2020 SPIE · CCC code: 0277-786X/20/\$21 · doi: 10.1117/12.2565804

Proc. of SPIE Vol. 11429 1142901-1

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Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *MIPPR 2019: Automatic Target Recognition and Navigation*, edited by Jianguo Liu, Hanyu Hong, Xia Hua, Proceedings of SPIE Vol. 11429 (SPIE, Bellingham, WA, 2020)
Seven-digit Article CID Number.

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510636354

ISBN: 9781510636361 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

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Contents

vii	<i>Authors</i>
ix	<i>Symposium Committee</i>
xiii	<i>Introduction</i>

AUTOMATIC TARGET RECOGNITION AND NAVIGATION

11429 02	Reference image generation for space target recognition on ground-based observation [11429-2]
11429 03	The maritime infrared target detection based on mixture Gaussian background modeling in the Fourier domain [11429-3]
11429 04	A new robust image feature point detector [11429-4]
11429 05	A medical image segmentation method based on SOM and wavelet transforms [11429-5]
11429 08	Ultra-close non-cooperative target measurement method for aircraft in-orbit maintenance mission [11429-9]
11429 09	Inshore ship detection based on improved faster R-CNN [11429-10]
11429 0B	Non-contact pantograph detection and location algorithm for monocular infrared images [11429-13]
11429 0C	A small dim targets detection method with dark-spots interference based on infrared images [11429-14]
11429 0D	Air target tracking method based on spectral unmixing [11429-15]
11429 0F	Center extraction for non-uniform line structured light stripe with wide view field [11429-17]
11429 0G	Semantic image segmentation network based on deep learning [11429-18]
11429 0H	A semantic segmentation method for satellite image change detection [11429-19]
11429 0I	Scale adaptive infrared small target detection with patch contrast measure [11429-20]
11429 0J	Maneuvering dim target detection based on space-time salient graph [11429-21]

11429 OK	A real-time location algorithm for critical points based on TMS320C6678 [11429-22]
11429 OM	Combined infrared simulation and pix2pix model for underground target detection [11429-24]
11429 ON	Realization of real-time detection algorithms for key parts of unmanned aerial vehicle based on support vector machine [11429-25]
11429 OP	Object detection based on hierarchical visual perception mechanism [11429-28]
11429 OQ	Location recognition based on image local feature matching [11429-29]
11429 OR	The research of image segmentation methods for interested area extraction in image matching guidance [11429-30]
11429 OS	Feature enhanced faster R-CNN for object detection [11429-31]
11429 OT	A method for centroid extraction based on Faster-RCNN [11429-33]
11429 OU	An improved detection and tracking method for small dim moving target based on particle filter [11429-34]
11429 OW	Aircraft detection in remote sensing imagery with lightweight feature pyramid network [11429-36]
11429 OX	Research on aerial object tracking algorithm based on multi-tracker relay [11429-37]
11429 OY	A fast multi-target detection method based on improved YOLO [11429-39]
11429 OZ	A CNN-based method for adaptive landmark selection in remote sensing image [11429-40]
11429 IO	Adding identity numbers to deep neural networks [11429-41]
11429 I2	A general fine-tune method for catastrophic forgetting [11429-43]
11429 I3	Anti-occlusion target tracking algorithm based on template filtering [11429-44]
11429 I6	Tiny object detection using multi-feature fusion [11429-51]
11429 I7	A scale-estimation method based on multi-scale multi-level filter for object detection and tracking [11429-52]
11429 I8	A tracking method to stabilize a target in the region of inherent noise in an image [11429-53]
11429 I9	Infrared ship target detection based on the combination of Bayesian theory and SVM [11429-54]

- 11429 1A **Joint modeling of operational rules and motion-radiation characteristics of targets recognition**
[11429-55]
- 11429 1B **Image registration and change detection method based on wavelet transform and SURF**
algorithm [11429-56]

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Cao, Yaoxin, 0X, 0Z	Qiu, Zhifeng, 0T
Chai, Lin, 0Q	Qu, Xin, 0M
Chen, Bo, 0G, 0H	Shen, Tao, 0X
Chen, Guibin, 19	Shi, Jiaowei, 0N
Chen, Huiyuan, 0K	Sun, Bin, 0T
Chen, Pan, 0R	Sun, Jianguo, 0B
Chen, Yongzhan, 0Z	Sun, Xiechang, 0Y
Chen, Zhong, 0G, 0H	Tan, Xiangyu, 09
Cheng, Wangrong, 13	Tao, Yang, 12
Deng, Qianqian, 0P	Tian, Jinwen, 13
Dong, Liqun, 16	Tian, Tian, 09
Dong, Shuai, 0C, 0D, 18	Wang, Gongyan, 0W
Dong, Yang, 0Z	Wang, Shuo, 0B
Dou, Hao, 0P	Wang, Shuwen, 1A
Gao, Ting, 1A	Wang, Weixiang, 0N
Gao, Yunlong, 10	Wang, Zhenrui, 0W
Gao, Zhuoyue, 0Q	Wu, Yifan, 0M
Hong, Hanyu, 0B, 0K, 0N, 0R	Xie, Weixin, 03
Hu, Ruo-lan, 0J	Xin, Lei, 0U
Hu, Zhongbing, 0S	Xu, Chunpu, 13
Huang, Jinghui, 0X	Xu, Danfeng, 0X
Huang, Zhenghua, 0B, 0R	Xu, Hai, 17
Hui, Mei, 16	Xu, Lei, 17
Huo, Tongtong, 0Y	Xu, Limei, 0T
Jiang, Hao, 0Y	Xu, Xiangrui, 10
Jiang, Jun, 0J, 0S	Xu, Yangyang, 0F
Jiang, Zhaozhen, 1B	Yan, Luxin, 0I
Jiao, Luofang, 0T	Yang, Jian, 0G, 0H
Jin, Lizuo, 0Q	Yang, Jingkun, 0H
Lee, Yaqin, 10	Yang, Peng, 16
Li, Dongdong, 08	Yang, Weidong, 0W, 0X, 0Y, 0Z
Li, Feng, 0U	Yang, Xue, 0U
Li, Hang, 02, 09	Yang, Yu, 0T
Li, Hao, 12	Yu, Qinzhang, 19
Li, Jingzong, 08	Yuan, Cao, 10, 12
Li, Shiyang, 0N	Zhai, Hao, 1B
Li, Xuan, 0B	Zhang, Jiahao, 0G, 0H
Li, Zhengtao, 0M, 17	Zhang, Liping, 05
Li, Zhimin, 0I	Zhang, Nan, 0U
Lin, Jin, 19	Zhang, Siyu, 0I
Liu, Chenhua, 0Z	Zhang, Teng, 0I
Liu, Jian, 0F	Zhang, Tianxu, 0C, 0D, 0M, 17, 18
Liu, Lu, 0J	Zhang, Xiaodan, 0T
Liu, Ming, 16	Zhang, Xiuhua, 0F
Liu, Xiaohua, 16	Zhang, Yanhou, 1B
Lu, Xiaotian, 0U	Zhang, Yanna, 0G, 0H
Lv, Siman, 0C, 0D	Zhang, Yaozong, 0N, 0R
Mao, Jiaxing, 0P	Zhao, Yi, 04
Pei, Jihong, 03	Zhao, Yuejin, 16

Zhong, Sheng, 0I
Zhou, Anran, 03
Zhou, Chen, 0R
Zhou, Jianbang, 0G, 0H
Zhu, Bing, 08
Zhu, Mingming, 12

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Introduction

Welcome to the Proceedings of the 11th International Symposium on Multispectral Image Processing and Pattern Recognition (MIPPR 2019) held 2–3 November 2019 in Wuhan, China.

MIPPR is a flagship biennial symposium which focuses mainly on the latest research in multispectral image processing and pattern recognition. The symposium has a broad charter. Multispectral is interpreted not just multiple-wavelength in a narrow sense but also multi-sensor, multi-modal, and multimedia. It covers many disciplines such as sensing, image processing, computer vision, pattern recognition and involves the development of efficient processing algorithms and their optimization and implementation. The wide range of applications considered in this symposium include automatic target recognition, autonomous navigation, medical image processing, remote sensing, geographic information systems and many others.

The symposium provides a forum for scientists, professors, engineers, and graduate students from universities, industries, and government laboratories to meet and exchange ideas and discuss theories, techniques, algorithms, and applications in multispectral image processing and pattern recognition. As expected, there were ample discussions both inside and outside the lecture halls helping to make MIPPR 2019 an exciting meeting.

In response to the Call for Papers, we received 258 submissions. Based on the reviews provided by an excellent program committee we accepted 199 papers covering many aspects of multispectral image processing and pattern recognition. To ensure a high-quality conference, all abstracts and Proceedings of SPIE papers are reviewed by the peers for technical merit and English expression. The proceedings from MIPPR 2019 consist of five volumes which will be included on the SPIE Digital Library.

- *MIPPR 2019: Multispectral Image Acquisition, Processing, and Analysis* (SPIE Volume 11428)
- *MIPPR 2019: Automatic Target Recognition and Navigation* (SPIE Volume 11429)
- *MIPPR 2019: Pattern Recognition and Computer Vision* (SPIE Volume 11430)
- *MIPPR 2019: Parallel Processing of Images and Optimization Techniques; and Medical Imaging* (SPIE Volume 11431)
- *MIPPR 2019: Remote Sensing Image Processing, Geographic Information Systems, and Other Applications* (SPIE Volume 11432).

The realization of a conference depends upon the hard work of many dedicated people. We would like to thank all the members of the Organizing Committee to

put together this symposium for the benefit of all the researchers. They are responsible for making this conference a success. We hope the papers and the research results presented at this conference will inspire new research in all the areas related with multispectral image processing and pattern recognition.

Bir Bhanu