

2015 21st Korea-Japan Joint Workshop on Frontiers of Computer Vision

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2015 Frontiers of Computer Vision

Message from chairs

- ❖ Message From FCV 2015 Chairs
- ❖ Invited Talks

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 - ❖ Oral Session 3 : Video Processing and Multimedia Understanding
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 - ❖ Oral Session 5 : Image Understanding
- ❖ FCV 2015 Poster Session
 - ❖ Poster Session 1
 - ❖ Poster Session 2

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Papers by Session

- ❖ Oral Session 1 : Computer Vision Fundamental
 - We1-1 Nonlinear Discriminant Analysis Using k Nearest Neighbor Estimation
Xuezhen Li and Takio Kurita(Hiroshima University, JAPAN)
 - We1-2 Depth Extended Online RPCA with Spatial-Temporal constraints for Robust Background Subtraction
*Sajid Javed(Kyungpook National University, KOREA), Thierry Bouwmans(Universit  de La Rochelle, FRANCE)
Soon Ki Jung(Kyungpook National University, KOREA)*
 - We1-3 Efficient Feature Selection Method Using Contribution Ratio by Random Forest
Ryuei Murata, Yohei Mishina, Yuji Yamauchi, Takayoshi Yamashita and Hironobu Fujiyoshi(Chubu University, JAPAN)
 - We1-4 Evaluating Freshness of Produce Using Transfer Learning
Antony Lam, Yoshinori Kuno (Saitama University, JAPAN), and Imari Sato (National Institute of Informatics, JAPAN)

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Papers by Session

- ❖ Oral Session 2 : Image Application
 - We2-1 Automatic Light Control System Using Fish-eye Lens Camera
Jong-in Gil, Saeed Mahmoudpour and Manbae Kim (Kangwon National University, KOREA)
 - We2-2 Fast and robust visual inspection system for tire surface thin defect
Takuma Funahashi, Kazuhiro Taki, Akito Kaneko and Hiroyasu Koshimizu(Chukyo University, JAPAN)
 - We2-3 Multi Language Text Detection Using Fast Stroke Width Transform
Wahyono (University of Ulsan, KOREA), Munho Jeong (Kwangwoon University, KOREA) and Kang-Hyun Jo (University of Ulsan, KOREA)
 - We2-4 Analysis of BRDF/BTDF for the texture representation of woven fabrics based on the impression-evaluation model
Lisa Park, Kensuke Tobitani, Kenji Katahira and Noriko Nagata(Kwansei Gakuin University, JAPAN)

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Papers by Session

❖ Oral Session 3 : Video Processing and Multimedia Understanding

We3-1 Evaluation of foreground detection methodology for a moving camera (\$

Tsubasa Minematsu, Hideaki Uchiyama, Atsushi Shimada, Hajime Nagahara and Rin-Ichiro Taniguchi(Kyushu University, JAPAN)

We3-2 Obscene Video Detection Using Multiple-Classifer Fusion ((

Jinwoo Choi and Seungwan Han(Electronics and Telecommunications Research Institute, KOREA)

We3-3 Phonographic Image Recognition Using Fusion of Scale Invariant Descriptors ((,

I Gede Pasek Suta Wijaya, IBK Widiartha(Mataram University, INDONESIA), Keiichi Uchimura and Gou Koutaki(Kumamoto University, JAPAN)

We3-4 Object Classification using CNN for Video Traffic Detection System (()'

Hyeok Jang, Hun-Jun Yang(Inha University, KOREA), Hun Lee(Laboratory of HuNS Inc., KOREA) and Dong-Seok Jeong(Inha University, KOREA)

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Papers by Session

❖ Oral Session 4 : Image Signal Processing

Th4-1 Estimating Spectral Reflectance of Fabrics from High-Resolution Multi-band HDR Images (() +

Shiro Tanaka, Aki Takayanagi, Masaru Tsuchida(Ritsumeikan University, JAPAN), Yoshiyuki Sakaguchi and Hiromi Tanaka(NTT Corporation, JAPAN)

Th4-2 Probabilistic Contour Mapping Using Oriented Gradient Features and SVM-Bagging ((() *

Shubhra Aich and Chil-Woo Lee(Chonnam National University, KOREA)

Th4-3 Impulse Noise Reduction using Distance Weighted Average Filter ((() *

Seungin Baek, Soowoong Jeong, Jong-Soo Choi and Sangkeun Lee(Chung-Ang University, KOREA)

Th4-4 Color Palette Generation for Image Classification by Bag-of-Colors ((() *

Ayaka Kojima and Tomoko Ozeki(Tokai University, JAPAN)

Th4-5 Layered optical tomography of multiple scattering media with combined constraint optimization ((() +,

Bingzhi Yuan, Toru Tamaki, Takahiro Kushida, Bisser Raytchev, Kazufumi Kanedal(Hiroshima University, JAPAN), Yasuhiro Mukaigawa and Hiroyuki Kubo(NAIST, JAPAN)

Th4-6 Binarization of Music Score Images Using Line Width Transform ((() , (

Quang Nhat Vo and Gueesang Lee(Chonnam National University, KOREA)

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Papers by Session

❖ Oral Session 5 : Image Understanding

Th5-1 Utilization of Optimally Selected Features for Car Detection in Calibrated Camera and LRF System

Laksono Kurnianggoro, Wahyono and Kang-Hyun Jo(University of Ulsan, KOREA)

Th5-2 Vehicle Detection Using PLS Hough Transform &

Remma Takeuchi, Kunihito Kato, David Harwood and Larry Davis(Gifu University, JAPAN)

Th5-3 Acute Lymphoid Leukemia Classification using Two-Step Neural Network Classifier,

Ivan Vincent(Pukyong National University, KOREA), Suk-Hwan Lee(Tomgmyong Universtiy, KOREA), Kwang-Seok Moon Ki-Ryong Kwon(Pukyong National University, KOREA)

Th5-4 Estimation of Object Functions Using Deformable Part Model

Yosuke Kitan, Tetsuya Takiguchi and Yasuo Arika(Kobe University, JAPAN)

Th5-5 Ellipse Detection Method based on the Advanced Three Point Algorithm

Bae-Keun Kwon and Dong-Joong Kang(Pusan National University, KOREA)

Th5-6 Robust object detection and adaptive background estimation based on radial reach correlation

Masaya Itoh(Hitachi, JAPAN)

Th5-7 Fast text line detection by finding linear connected components on Canny edge image

Hyun Il Jung, Hae Kwang Kim (Sejong University, KOREA) and Weon Gun Oh (Electronics and Telecommunications Research Institute, KOREA)

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Papers by Session

❖ Poster Session 1 (1/3)

P1-1 Omni-directional 3D Measurement Using Double Fish-eye Stereo Vision

Yosuke Iguchi and Jun'ichi Yamaguchi(Kagawa University, JAPAN)

P1-2 Evaluation of Background Subtraction Algorithms for Video Surveillance

Ajmal Shahbaz, Joko Hariyono and Kang-Hyun Jo(University of Ulsan, KOREA)

P1-3 A Fast Hough Transform Based on C3TR Using Shift Operation

Yuki Kondo, Munetoshi Numada and Hiroyasu Koshimizu(Chukyo University, JAPAN)

P1-4 Study on performance of MPEG-7 visual descriptors for deformable object retrieval *

Hyun Il Jung, Hae Kwang Kim(Sejong University, KOREA) and Weon Gun Oh(Electronics and Telecommunications Research Institute, KOREA)

P1-5 Scattering Tomography Using Ellipsoidal Mirror

Ryuichi Akashi, Hajime Nagahara, Yasuhiro Mukaigawa and Rin-ichiro Taniguchi(Kyushu University, JAPAN)

P1-6 Query expansion with pairwise learning in object retrieval challenge

Hao Liu, Xing Xu, Hideaki Uchiyama, Atsushi Shimada, Hajime Nagahara and Rin-ichiro Taniguchi(Kyushu University, JAPAN)

P1-7 Rigid and Non-Rigid Object Image Matching using Deformable Object Image Discrimination

Jian Feng, In-Su Won, Jae-Hyup Jeong and Dong-Seok Jeong(Inha University, KOREA)

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Papers by Session

❖ Poster Session 1 (2/3)

P1-8 Tumor Detection on Brain MR Images using Regional Features: method and preliminary results (Kang Han Oh, Soo Hyung Kim(Chonnam National University, KOREA) and Myungeun Lee(Seoul National University, KOREA))

P1-9 Skin Region Detection by Ambient Light Estimation Method (Tomoya Kondo, Kunihito Kato and Kazuhiko Yamamoto(Gifu University, JAPAN)) -

P1-10 Mood from painting (Dongwann Kang, Hyounh Shim and Kyunghyun Yoon(Chung-Ang University, KOREA))

P1-11 Image Matching by Eigen Template Method for Multi-class Classification (Koshiro Yata, Gou Koutaki and Keiichi Uchimura(Kumamoto University, JAPAN)) -

P1-12 Facial Features Extraction by Accelerated Implementation of Circular Hough Transform and Appearance Evaluation (Hayato Iwasa, Wataru Ohyama, Tetsushi Wakabayashi and Fumitaka Kimura(Mie University, JAPAN))

P1-13 A Framework of Augmented Reality for a Geotagged Video (Kyoung-Ho Choi(Mokpo National University, KOREA), Chung-Hyun Ahn(ETRI, KOREA) and Tae-Hyun Hwang(ITS Korea, KOREA))

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Papers by Session

❖ Poster Session 1 (3/3)

P1-14 Hash Function for 3D Mesh Model Authentication (Suk-Hwan Lee(Tongmyong University, KOREA), Ki-Ryong Kwon(Pukyong National University, KOREA), Dong Kyue Kim(Hanyang University, KOREA) and Oh-Jun Kwon(Donggeui University, KOREA))

P1-15 Autonomous Flight System using Marker Recognition on Drone (Jin Kim, Yoon Suk Lee, Sang Su Han, Sang Ho Kim, Gun Hyuk Lee, Ho Jun Ji, Hye Ji Choi and Kwang Nam Choi (Chung-Ang University, KOREA))

P1-16 Variation of Edge Detection Uncertainty on Fish-Eye Images (Kenji Terabayashi, Takaaki Oiwa (Shizuoka University, JAPAN) and Kazunori Umeda (Chuo University, JAPAN))

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Papers by Session

❖ Poster Session 2 (1/3)

- P2-1 Pornographic Video Classification using Fast Motion Features *
Jung-Jae Yu and Seung-Wan Han(ETRI, KOREA)
- P2-2 Preliminary Study on Automatic Printing System for Film Package Considering Distortion &\$
Itaru Yamanaka(Kumamoto University, JAPAN), Masahiro Migita and Masashi Toda(Center for Management of Information Technologies, JAPAN)
- P2-3 A Method for Character and Photograph Segmentation using Dynamic Thresholding &\$(
Ryuhei Noguchi and Jun-Ichiro Hayashi(Kagawa University, JAPAN)
- P2-4 Spatially Adaptive Image Defogging using color characteristics &\$,
Yoshitaka Minami(Kumamoto University, JAPAN), Masahiro Migita(Niigata University, JAPAN), Masashi Toda and Koichiro Enomoto(Center for Management of Information Technology, JAPAN)
- P2-5 Edge Detection in Wavelet Transform Domain &%(
Woon Cho and Joohyeon Jeon(Dongguk University, KOREA)
- P2-6 Smoke Detection for Static Cameras &%(
Alexander Filonenko, Danilo Cáceres Hernández and Kang-Hyun Jo(University of Ulsan, KOREA)

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Papers by Session

❖ Poster Session 2 (2/3)

- P2-7 A System Architecture for Real Time Traffic Monitoring in Foggy Video &%(
Sang-Kyoon Kim, Kyoung-Ho Choi and Soon-Young Park(Mokpo National University, KOREA)
- P2-8 Centralization Problem of Contacting Interaction in Multiple Object Tracking &%(
Chi-Min Oh and Chil Woo Lee(Chonnam National University, KOREA)
- P2-9 Robust Detection of Mosaic Masking Region &%(
Jung-Jae Yu and Seung-Wan Han(ETRI, KOREA)
- P2-10 Color Saliency for Object Identification & '(
Yuko Ozasa, Naoko Enami and Yasuo Arika (Kobe University, JAPAN)
- P2-11 Rotated Face Recognition by Manifold Learning with Auto-associative Neural Network & '(
Mizuki Ito, Wataru Ohyama, Tetsushi Wakabayashi and Fumitaka Kimura(Mie university, JAPAN)
- P2-12 Determination of 3D Object Pose in Point Cloud with CAD Model & (&
Duc Dung Nguyen, Jae Pil Ko and Jae Wook Jeon(Sungkyunkwan University, KOREA)

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Papers by Session

❖ Poster Session 2 (3/3)

P2-13 A Method of Ball Spin Estimation using Seams Lines

Shuhei Ando and Jun-Ichiro Hayashi(Kagawa University, JAPAN)

P2-14 Movement Direction-based Approaches for Pedestrian Detection in Road Scenes

Seong Pyo Jeon, Yoon Suk Lee and Kwang Nam Choi(Chung-Ang University, KOREA)

P2-15 Object Pose Estimation Using Category Information from a Single Image *

Shunsuke Shimizu(Saitama University, JAPAN), Hiroshi Koyasu(Tokyo University, JAPAN), Yoshinori Kobayashi and Yoshinori Kuno(Saitama University, JAPAN)

P2-16 Development of Deep Learning-based Facial Expression Recognition System

Heechul Jung, Sihaeng Lee, Sunjeong Park, Byungju Kim, Junmo Kim (KAIST, KOREA), Injae Lee and Chung Hyun Ahn (ETRI, KOREA)

P2-17 A Gesture based TV Control Interface for Visually Impaired: Initial Design and User Study

Inwook Hwang, Hyun-Cheol Kim (ETRI, KOREA), Karam Kim, Jong-Il Park (Hanyang University, KOREA), Jihun Cha and Chunghyun Ahn (ETRI, KOREA)