

IS&T International Symposium on Electronic Imaging Science and Technology 2016

Imaging and Multimedia Analytics in a
Web and Mobile World 2016

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Editors:

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Imaging and Multimedia Analytics in a Web and Mobile World 2016

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Monday, February 15, 2016

Face Analysis and Recognition

Session Chair: Qian Lin, Hewlett-Packard Company (USA)

9:10 – 10:10 am

Golden Gate 8

9:10

IMAWM-455

Joint and discriminative dictionary learning for facial expression recognition, Sriiram Kumar, Behnaz Ghoraani, and Andreas Savakis, Rochester Institute of Technology (USA)

9:30

IMAWM-456

Class specific discriminant dictionary learning with kernels for face recognition, Bao-Di Liu¹, Yuting Wang², Liangke Gui³, Yu-Xiong Wang³, Bin Shen⁴, Xue Li⁵, and Yan-Jiang Wang¹; ¹China University of Petroleum (China), ²Karlsruhe Institute of Technology (Germany), ³Carnegie Mellon University (USA), ⁴Purdue University (USA), and ⁵Tsinghua University (China),

9:50

IMAWM-457

Face pose normalization and simulation methods based on multi-view face alignment, Changsong Liu^{1,2,3} and Liting Wang¹; ¹Department of Electronic Engineering, Tsinghua University (China), ²State Key Laboratory of Intelligent Technology and Systems, and ³Tsinghua National Laboratory for Information Science and Technology (China)

10:10 – 10:30 am Coffee Break

Keynote: Social Media & Mobile Imaging

Session Chair: Zhigang Fan, Apple Inc (USA)

10:30 – 11:30 am

Golden Gate 8

IMAWM-458

Browsing Information Overloading Unstructured Multimedia Social Network Contents on Mobile Devices, Chang Wen Chen, State University of New York at Buffalo (USA)

Social Media & Mobile Imaging

Session Chair: Mu Qiao, Shutterfly Inc. (USA)

11:30 am – 12:30 pm

Golden Gate 8

11:30

IMAWM-459

Hazmat sign location detection based on Fourier shape descriptors, Khariththa Thongkor¹, Albert Parra Pozo², Thumrongrat Amornraska¹, and Edward Delp²; ¹King Mongkut's University of Technology Thonburi (Thailand) and ²Purdue University (USA)

11:50

IMAWM-460

Is it possible to attract new customers via mobile services for printed products?, Reiner Fageth, CEWE Stiftung & Co. KGAA (Germany)

12:10

IMAWM-461

Robust and secure image encryption schemes during JPEG compression process, Kun He^{1,2}, Christophe Bidan^{1,2}, Gaëtan Le Guelvouit¹, and Cyrielle Feron¹; ¹B-Com and ²CentraleSupélec (France)

Imaging and Multimedia Analytics in a Web and Mobile World 2016

12:30 – 2:00 pm Lunch Break

EI 2016 Opening Plenary and Symposium Awards

Session Chair: Choon-Woo Kim (Inha University)

2:00 – 3:00 PM

Continental Ballroom 5

Illuminating a bright future for medicine, Audrey K. Bowden, Stanford University (USA)

3:00 – 3:30 pm Coffee Break

Image Analysis and Big Data

Session Chair: Bin Shen, Google Research (USA)

3:30 – 4:30 pm

Golden Gate 8

3:30 IMAWM-462
Face search in a big data system, Qian Lin¹, Carlos Ceja², Meichun Hsu², Yongqiang Mou¹, and Min Xu¹; ¹HP Labs and ²Hewlett-Packard Enterprise (USA)3:50 IMAWM-463
MS-Celeb-1M: Challenge of Recognizing One Million Celebrities in the Real World, Yandong Guo, Lei Zhang, Yuxiao Hu, Xiaodong He, and Jianfeng Gao, Microsoft (USA)4:10 IMAWM-464
Data analysis on camera data for willing-to-pay trend in online photo service, Mu Qiao and Ariawan Suwendi, Shutterfly Inc. (USA)

5:00 – 6:00 pm EI 2016 Symposium Reception

Tuesday, February 16, 2016**Video Analysis**

Session Chair: Reiner Fageth, CEWE Stiftung & Co. KGAA (Germany)

9:30 – 10:10 am

Golden Gate 8

9:30 IMAWM-465
Touch event recognition for human interaction, Qingshuang Chen, He Li, Rana Abu-Zhaya, Amanda Seidl, Fengqing Zhu, and Edward Delp, Purdue University (USA)9:50 IMAWM-466
Real Time Automated Machinery Threat Detection and Identification System for Pipeline Infrastructure Protection, Almabrok Essa, Paheding Sidike, and Vijayan Asari, University of Dayton (USA)

10:10 – 10:30 am Coffee Break

Invited Talk: Deep Learning

Session Chair: Andreas Savakis, Rochester Institute of Technology (USA)

10:30 – 11:10 am

Golden Gate 8

IMAWM-467
Deep 3D shape representation, Yi Fang, New York University Abu Dhabi (USA)**Deep Learning**

Session Chair: Yandong Guo, Microsoft (USA)

11:10 am – 12:30 pm

Golden Gate 8

11:30 IMAWM-469
Automatic mobile retinal microaneurysm detection using handheld fundus camera via cloud computing, Jane You¹, Qin Li², and Zhenhua Guo³; ¹The Hong Kong Polytechnic University, ²Shenzhen Institute of Information Technology, and ³Tsinghua University (China)11:50 IMAWM-470
Two-step learning of deep convolutional neural network for discriminative face recognition under varying illumination, Yeoreum Choi, Hyung-Il Kim, and Yong Man Ro, Korea Advanced Institute of Science and Technology (South Korea)12:10 IMAWM-471
Deep network for accurate tracking and analyzing gait patterns in low resolution video surveillance towards threat and person identification, Binu Nair and Kimberly Kendricks, University of Nevada, Las Vegas (USA)

12:30 – 2:00 pm Lunch Break

EI 2016 Tuesday Plenary and Symposium Awards

Session Chair: Nitin Sampat (Rochester Institute of Technology)

2:00 – 3:00 PM

Continental Ballroom 5

Pushing computational photography deeper into imaging system design, Ren Ng, University of California, Berkeley (USA)

3:00 – 3:30 pm Coffee Break

Image Analysis and Machine Learning

Session Chair: Jan Allebach, Purdue University (USA)

3:30 – 4:50 pm

Golden Gate 8

3:30 IMAWM-472
One-class maximum margin matrix factorization, Bin Shen, Cheng Lu, and Qifan Wang, Purdue University (USA); Si Chen, Xiamen University of Technology (China); and Yan Yan, Xiamen University (China)4:10 IMAWM-474
A Bayesian Approach to Infer Photo Aesthetic Quality Scores From Psychophysical Experiment, Jianyu Wang¹, Yandong Guo², and Jan Allebach¹; ¹Purdue University and ²Microsoft Research (USA)**EI 2016 Symposium Demonstration Session and Exhibit Hall****Happy Hour****5:30 – 7:00 PM**

Continental Ballroom Foyer