

22nd ACM International Conference on Multimedia

ACM Multimedia 2014

November 3-7

Orlando, Florida



Association for
Computing Machinery



Conference Organization

General Chairs

Kien Hua, University of Central Florida, USA

Yong Rui, Microsoft Research, China

Ralf Steinmetz, Technische Universität Darmstadt, Germany

Technical Program Committee Chairs

Alan Hanjalic Delft University of Technology, Netherlands

Apostol (Paul) Natsev, Google, USA

Wenwu Zhu, Tsinghua University, China

High-Risk High-Reward Papers Chairs

Abdulmotaleb El Saddik, University of Ottawa, Canada

Rainer Lienhart, Augsburg University, Germany

Balakrishnan Prabhakaran, University of Texas at Dallas,
USA

Multimedia Grand Challenge Chairs

Changsheng Xu, Chinese Academy of Sciences, China

Cha Zhang, Microsoft Research, USA

Technical Demo Chairs

Shu-Ching Chen, Florida International University, USA

Stefan Göbel, Technische Universität Darmstadt, Germany

Carsten Griwodz, Simula Research Laboratory, Norway

Local Arrangement Chairs

Mainak Chatterjee, University of Central Florida, USA

Cliff Zou, University of Central Florida, USA

Finance and Registration Chairs

Tai Do, Microsoft, USA

Ning Jiang, Institute for Systems Biology, USA

Ming Li, California State University, USA

Sponsorship Chairs

Dr. Hassan Foroosh, University of Central Florida, USA

Mark Liao Academia Sincia, Taipei, Taiwan

Travel Grant Chairs

Danzhou Liu, NetApp, USA

JungHwan Oh, University of North Texas, USA

Proceedings Chairs

Ying Cai, Iowa State University, USA

Wallapak Tavanapong, Iowa State University, USA

History Preservation Chair

Duc Tran, University of Massachusetts in Boston, U.S.A

Roy Villafane, Andrews University, USA

Publicity and Social Media Chairs

Grace Ngai, Hong Kong Polytechnic University,
S.A.R. China

Author's Advocate

Pablo Cesar, CWI, Netherlands

Industrial Exhibit Chairs

Minoru Etoh (Mick), NTT DoCoMo, Japan

Dulce Ponceleón, IBM Research, USA

Interactive Art Exhibit Chairs

Andrea Cavallaro, Queen Mary University of London, UK

Cheryl Cabrera, University of Central Florida, USA

Doctoral Symposium Chairs

Laszlo Böszörményi, University of Klagenfurt, Austria
Christian Breiteneder, Technical University of Vienna,
Austria

Oge Marques, Florida Atlantic University, USA

Workshops Chairs

Andreas Mauthe, University of Lancaster, U.K.
Max Mühlhäuser, Technische Universität, Germany
Hari Sundaram, University of Illinois at Urbana Champaign,
USA

Web Chair

Alex Aved, U.S. Air Force Research Lab, USA

Tutorial Chairs

Hermann Hellwagner, University of Klagenfurt, Austria
Wei Tsang Ooi, National University of Singapore, Singapore

Panel Chairs

Wolfgang Klas, University of Vienna, Austria
Chang Wen Chen, State University of New York at Buffalo,
USA

Industrial Panel Chairs

Borko Furth, Florida Atlantic University, USA
Ivica Rimac, Bell Labs / Alcatel-Lucent, USA

Open Source Competition Chairs

Andreas Girgensohn, FX Palo Alto Laboratory, Inc., USA
Lynn Wilcox, FX Palo Alto Laboratory, Inc., USA

Technical Program Area Chairs

Multi-modal Analysis and Description

Alex Hauptmann, Carnegie-Mellon University, USA
Benoit Huet, Eurecom, France
Xuelong Li, Chinese Academy of Sciences, China
Ansgar Scherp, Kiel University and Leibniz Information
Center for Economics, Germany

Mubarak Shah, University of Central Florida, USA
Cees Snoek, University of Amsterdam, Netherlands
Rong Yan, Square, USA

Big and Broad Multimedia

Nuria Oliver, Telefonica, Spain
Vivek Singh, MIT, USA
Alan Smeaton, Dublin City University, Ireland

Affective and Socially-Aware Multimedia

Hatice Gunes, Queen Mary University of London, UK
Hayley Hung, Delft University of Technology, Netherlands
Bjorn Schuller, TU Munich, Germany

Social Media and Presence

Peng Cui, Tsinghua University, China
Lexing Xie, Australian National University

Music Audio and Speech

Xavier Anguera, Telefonica, Spain
Cynthia Liem, Delft University of Technology, Netherlands

Multimedia HCI & QoE

Marc Cavazza, Teesside University, UK

Touradj Ebrahimi, EPFL, Switzerland

Multimedia Search and Recommendation

Xian-Sheng Hua, Microsoft Research, USA

Qi Tian, University of Texas, San Antonio, USA

Shuicheng Yan, National University of Singapore, Singapore

Hector Yee, Google, USA

Crowdsourcing and Multimedia

Kuan-Ta Chen, Academia Sinica, Taiwan

Martha Larson, Delft University of Technology, Netherlands

Deep Learning for Multimedia

Marc'Aurelio Ranzato, Facebook, USA

Kau Yu, Baidu, China

George Toderici, Google, USA

Multimedia Security, Piracy and Forensics

Gerald Friedland, ICSI Berkeley, USA

Mohan Kankanhalli, National University of Singapore, Singapore

Media Transport and Delivery

Carsten Griwodz, University of Oslo, Norway

Baochun Li, University of Toronto, Canada

Multimedia Systems and Middleware

Jiangchuan Liu, Simon Fraser University, Canada

Roger Zimmermann, National University of Singapore,
Singapore

Multimedia Art, Entertainment and Culture

Teresa Chambel, University of Lisbon, Portugal

Frank Nack, University of Amsterdam, Netherlands

Multimedia and Society

Jenny Benois-Pineau, University of Bordeaux, France

Sponsors & Supporters

Platinum Level Sponsors

National Science Foundation (NSF)

Symantec Corporation

University of Central Florida, College of Engineering &
Computer Science

Gold Level Sponsors

Fx Palo Alto Laboratory (FXPAL)

Google, Inc.

Silver Level Sponsors

IBM Research

Microsoft Research

Yahoo! Labs

NASA - Florida Space Grant Consortium

Yandex



Harry Shum, Microsoft

Bing, the Fastest Growing Image Search Engine

Since the launch of Bing (www.bing.com) in June 2009, we have seen Bing web search market share in the US more than doubled and Bing image search query share quadrupled. In this talk, I will share our experience building Bing image search as the fastest growing image search engine, and discuss the challenges and opportunities in image search. Specifically, I will talk about how we have significantly improved image search quality, and built differentiated image search user experience using NLP, entity, big data, machine learning and computer vision technologies. By leveraging big data from billions of search queries, billions of images on the web and from the social networks, and billions of user clicks, we have designed massive machine learning

systems to continuously improve image search quality. With the focus on natural language and entity understanding, for instance, we have improved Bing's ability to understand the user intent beyond queries and keywords. I will demonstrate with many examples how Bing has delivered a superior image search user experience, quantitatively, qualitatively and aesthetically, by utilizing computer vision techniques.



Rosalind Picard, MIT Media Lab
***Affective Media and Wearables:
Surprising Findings***

Over a decade ago, I suggested that computers will need the skills of emotional intelligence in order to interact with regular people in ways that they perceive as intelligent. Our lab embarked on this journey of “affective computing” with a focus on first enabling computers to better understand and communicate human emotion. Our main tools have been wearable sensors (several which we created), video, and audio, coupled with signal processing, machine learning and pattern analysis of multimodal human data. Along the way we encountered several surprises. This talk will highlight some of the challenges we have faced, some accomplishments, and the most surprising and rewarding findings. Our findings reveal the power of the human emotion system not only in intelligence, in social interaction, and in everyday media consumption, but also in autism, epilepsy, and sleep memory formation.

Wednesday November 5 Award Presentation Talk



Klara Nahrstedt, University of Illinois at Urbana-Champaign

Back and to the Future: Quality Provisioning for Multimedia Content Delivery

Quality Provisioning concept has been with us for at least 25 years and it started with the claim to be one of the necessary building blocks for multimedia content distribution and delivery. A lot of research has been done on Quality of Service and Quality of Experience by the ACM Special Interest Group on Multimedia (SIGMM) community and other research communities. So where are we with respect to broader impact and deployment of Quality Provisioning in multimedia networks, systems and applications? Did it become a necessary building block for multimedia content delivery or not? During the talk I will go back and to the future, discussing my journey regarding quality topics ranging from Quality of Service (QoS) in multimedia

networks and end systems, to Experiential Quality (QoE) for current and future multimedia applications. I will reflect on successes and failures of Quality Provisioning mechanisms, policies, algorithms, protocols and management frameworks in multimedia networks, systems and applications as they evolved up to the point of an almost ubiquitous presence of multimedia services and the on-going discussions about network neutrality and multimedia service provisioning. We will also argue that the future for Quality Provisioning is bright with numerous exciting research problems since users expect at this point nothing but high quality multimedia content delivery anytime, anywhere, any content, and on any device.

Art Exhibit: Tuesday, Wednesday, Thursday

Location: Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda

Tuesday - Thursday, 10:30-5:30

Chair: Cheryl Cabrera, University of Central Florida, USA

Audiovisual Resynthesis in an Augmented Reality

Parag Kumar Mmital

Sound-Light Gible

Charles Roberts

Gone: An Interactive Experience for Two People

Michael Riegler, Mathias Lux, Christian Zellot, Lukas Knoch, Horst Schnattler, Sabrina Napetschnig, Julian Kogler, Claus Degendorfer, Norbert Spot, Manuel Zoderer

Circles and Sounds

Sarah Linebaugh

Qi Visualizer - An Interactive Pulse Spectrogram Visualization using Mobile Participatory Biometrics

Yuan-Yi Fan

Stoicheia

F. Myles Scotto, Jean-Michel Crettaz

States of Diffusion for $n+1$ Devices

Lonce Wyse

Tutorials - November 3, 2014

	Azalea & Begonia	Fuchsia & Gardenia	Hibiscus & Iris	Kahili & Lily	Poinsettia & Quince	Camellia & Dogwood	Palm 2, Palm 3, Palm 4, & Palm 5	
08:30-10:00	Learning Knowledge Bases for Text and Multimedia	Immersive 3D Communication	Social Multimedia Computing	Emerging Topics on Personalized and Localized Multimedia Information Systems	An Introduction to Arts and Digital Culture inside Multimedia	SIGMM Retreat (by invitation)		
10:00-10:30	Break							
10:30-12:00	Learning Knowledge Bases for Text and Multimedia	Immersive 3D Communication	Social Multimedia Computing	Emerging Topics on Personalized and Localized Multimedia Information Systems	An Introduction to Arts and Digital Culture inside Multimedia			
12:00-02:00	Lunch Break							
02:00-03:30	Video Hyperlinking	Immersive 3D Communication	Social Multimedia Computing	Emerging Topics on Personalized and Localized Multimedia Information Systems	Over-the-Top Content Delivery: State of the Art and Challenges Ahead			
03:30-04:00	Break							
04:00-05:30	Video Hyperlinking	Immersive 3D Communication	Social Multimedia Computing	Emerging Topics on Personalized and Localized Multimedia Information Systems	Over-the-Top Content Delivery: State of the Art and Challenges Ahead			
06:00-08:30								

Conference Day 1 - November 4, 2014

	Palm 1			Palm 2	Palm 3	Palm 4	Palm 5	Hibiscus, Iris, Poinsettia, Quince, Areca, & Veranda	Edelweiss
08:30-10:00				Keynote 1: Harry Shum Bing, the Fastest Growing Image Search Engine					
10:00-10:30	Posters 1, (Preparation)	Industrial Exhibit, (Preparation)	Demo 1 (Preparation)	Break				Art Exhibit (Preparation)	
10:30-12:00	Posters 1	Industrial Exhibit	Demo 1	Best Paper Session				Art Exhibit	
12:00-02:00	Lunch Break "WOMEN IN SIGMM" Lunch (by invitation) – Covington Mill Restaurant								ACM TOMM Meeting (by invitation)
02:00-03:30	Posters 1	Industrial Exhibit	Demo 1	Research Panel 1 Looking for Emotional and Social Signals in Multimedia: Where Art Thou ?	Oral 1 Multimedia Art and Entertainment	Oral 2 Action, Activity, and Event Recognition	Software Competition		
03:30-04:00	Posters 1 (Presentations)	Break							
04:00-05:30	Posters 1	Industrial Exhibit	Demo 1		Oral 3 Music, Speech, and Audio	Oral 4 Deep Learning for Multimedia	Software Competition		

Conference Day 2 - November 5, 2014

	Palm 1			Palm 2	Palm 3	Palm 4	Palm 5	Hibiscus, Iris, Poinsettia, Quince, Areca, & Veranda	Edelweiss
08:30-10:00				SIGMM Award Presentation and Talks Technical Achievement Award, Rising Star Award, and Best Thesis Award					
10:00-10:30	Posters 2, (Preparation)	Industrial Exhibit, (Preparation)	Demo 2 (Preparation)	Break				Art Exhibit (Preparation)	
10:30-12:00	Posters 2	Industrial Exhibit	Demo 2	Grand Challenge Presentations				Art Exhibit	MMSJ Meeting <small>(by invitation)</small>
12:00-02:00	Lunch Break Doctoral Symposium Lunch (by invitation) – Covington Mill Restaurant								IEEE MM Meeting <small>(by invitation)</small>
02:00-03:30	Posters 2	Industrial Exhibit	Demo 2	Industry Panel Innovative Multimedia Technologies in Industrial Applications	Oral 5 Multimedia HCI and QoE	Oral 6 Multimedia Analysis and Mining	Doctoral Symposium		
03:30-04:00	Posters 2 (Presentations)	Industrial Exhibit	Demo 2	Break					
04:00-05:30	Posters 2	Industrial Exhibit	Demo 2		Oral 7 Multimedia Systems	Oral 8 Emotional and Social Signals in Multimedia	Doctoral Symposium		
6:30-10:00				Banquet TOMM NG Award Presentation					

Conference Day 3 - November 6, 2014

	Palm 1			Palm 2	Palm 3	Palm 4	Palm 5	Hibiscus, Iris, Poinsettia, Quince, Areca, & Veranda	Edelweiss
08:30-10:00				Keynote 2: Rosalind Picard Affective Media and Wearables: Surprising Findings					
10:00-10:30	Posters 3, (Preparation)	Industrial Exhibit, (Preparation)	Demo 3 (Preparation)	Break				Art Exhibit (Preparation)	
10:30-12:00	Posters 3	Industrial Exhibit	Demo 3	“High-Risk-High-Return” Presentations	Oral 9 Multimedia Applications			Art Exhibit	JMM Meeting (by invitation)
12:00-02:00	Lunch Break			SIGMM Business Meeting (open to all, lunch provided)	Lunch Break				
02:00-03:30	Posters 3	Industrial Exhibit	Demo 3	Research Panel 2 The Future of Audio Multimedia	Oral 10 Privacy, Health, and Well-being	Oral 11 Multimedia Search and Indexing	Exchange Meeting		
03:30-04:00	Posters 3 (Presentations)	Industrial Exhibit	Demo 3	Break					
04:00-05:30	Posters 3	Industrial Exhibit	Demo 3		Oral 12 Social Media and Crowd	Oral 13 Multimedia Recommendations			
05:30-06:00				Closing Session Best Demo Awards					

Workshops - November 7, 2014

	Palm 3	Palm 4	Palm 5	Fuchsia	Gardenia	Hibiscus
08:30-10:00	HuEvent 2014: Human-Centered Event Understanding from Multimedia	Serious Games 2014	ISMM 2014: Internet-Scale Multimedia Management	AVEC 2014: Audio/Visual Emotion Challenge	WCPR 2014: Computational Personality Recognition	ImmersiveME 2014: Immersive Media Experiences
10:00-10:30	Break					
10:30-12:00	HuEvent 2014: Human-Centered Event Understanding from Multimedia	Serious Games 2014	ISMM 2014: Internet-Scale Multimedia Management	AVEC 2014: Audio/Visual Emotion Challenge	WCPR 2014: Computational Personality Recognition	ImmersiveME 2014: Immersive Media Experiences
12:00-02:00	Lunch Break					
02:00-03:30	HuEvent 2014: Human-Centered Event Understanding from Multimedia	Serious Games 2014	ISMM 2014: Internet-Scale Multimedia Management	AVEC 2014: Audio/Visual Emotion Challenge	EMASC 2014: Emerging Multimedia Applications and Services for Smart Cities	ImmersiveME 2014: Immersive Media Experiences
03:30-04:00	Break					
04:00-05:30	HuEvent 2014: Human-Centered Event Understanding from Multimedia	Serious Games 2014	ISMM 2014: Internet-Scale Multimedia Management	AVEC 2014: Audio/Visual Emotion Challenge	EMASC 2014: Emerging Multimedia Applications and Services for Smart Cities	ImmersiveME 2014: Immersive Media Experiences

Workshops - November 7, 2014

	Iris	Poinsettia	Quince	Lanai	Magnolia
08:30-10:00	MAED 2014: Regular & Data Challenge Workshop on Multimedia Analysis for Ecological Data	SAM 2014: Socially-Aware Multimedia	PIVP 2014: Perception Inspired Video Processing	GeoMM 2014: Geotagging and Its Applications	CrowdMM 2014: Crowdsourcing for Multimedia
10:00-10:30	Break				
10:30-12:00	MAED 2014: Regular & Data Challenge Workshop on Multimedia Analysis for Ecological Data	SAM 2014: Socially-Aware Multimedia	PIVP 2014: Perception Inspired Video Processing	GeoMM 2014: Geotagging and Its Applications	CrowdMM 2014: Crowdsourcing for Multimedia
12:00-02:00	Lunch Break				
02:00-03:30	MAED 2014: Regular & Data Challenge Workshop on Multimedia Analysis for Ecological Data	SAM 2014: Socially-Aware Multimedia	PIVP 2014: Perception Inspired Video Processing		CrowdMM 2014: Crowdsourcing for Multimedia
03:30-04:00	Break				
04:00-05:30	MAED 2014: Regular & Data Challenge Workshop on Multimedia Analysis for Ecological Data	SAM 2014: Socially-Aware Multimedia	PIVP 2014: Perception Inspired Video Processing		CrowdMM 2014: Crowdsourcing for Multimedia

Monday November 3: Tutorials

ACM Multimedia 2014 tutorials will address the state-of-the-art research and developments regarding all aspects of multimedia, and will be of interest to the entire multimedia community, from novices in the world of multimedia to the most seasoned researchers, from people working in academia to industry professionals.

Full day tutorials:

8:30am – 5:30pm

Immersive 3-D Communication

Presenters: Wanmin Wu, Cha Zhang

Location: Fuschia & Gardenia

Social Multimedia Computing

Presenters: Peng Cui, Lexing Xie, Jitao Sang,
Changsheng Xu

Location: Hibiscus & Iris

Emerging Topics on Personalized & Localized Multimedia Information Systems

Presenters: Yi Yu, Kiyoharu Aizawa, Toshihiko
Yamasaki, Roger Zimmerman

Location: Kahili & Lily

Half day tutorials:

8:30-12:00

Learning Knowledge Bases for Text & Multimedia

Presenters: Lexing Xie, Haixun Wang

Location: Azalea & Begonia

An Introduction To Arts& Digital Culture Inside Multimedia

Presenters: David A. Shamma, Daragh Byrne

Location: Poinsetta & Quince

Half day tutorials:

2:00pm – 5:30pm

Over the Top Content Delivery: State of the Art & Challenges Ahead

Presenters: Vasileios Mezaris, Benoit Huet

Location: Poinsetta & Quince

Video Hyperlinking

Presenters: Christian Timmerer, Ali. C. Begen

Location: Azalea & Begonia

Tuesday November 4: Conference Day 1

8:30am **Keynote: Harry Shum, Microsoft**
Bing, the Fastest Growing Image Search Engine
Location: Palm

10:00 – 10:30 **Break**
Setup for posters, demo, industrial exhibit in Palm 1
Setup for art exhibit in Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda

10:30 – 12:00 **Best Paper Session**
Session Chair: Alan Hanjalic, Delft University of Technology, Netherlands
Location: Palm 2-5
Cross-modal Retrieval with Correspondence Autoencoder
Fanxiang Feng, Xiaojie Wang, Ruifan Li

VideoStory: A New Multimedia Embedding for Few-Example Recognition and Translation of Events
Amirhossein Habibiyan, Thomas Mensink, Cees G.M. Snoek

Say Cheese vs. Smile: Reducing Speech-related Variability for Facial Emotion Recognition
Yelin Kim, Emily Mower Provost

10:30 – 5:30 **Posters 1**
Session Chairs: Duc Tran, University of Massachusetts at Boston, USA
Roy Villafane, Andrews University, USA
Location: Palm 1

Presentations: 3:30pm

Scalable Image Search with Reliable Binary Code

Chic or Social: Visual Popularity Analysis in Online Fashion Networks

n-gram Models for Video Semantic Indexing

Line-based Drawing Style Description for Manga Classification

Supervised Hashing with Error Correcting Codes

Pedestrian Attribute Classification at Far Distance

MSVA: Musical Street View Animator: An Effective and Efficient Way to Enjoy the Street Views of Your Journey

QoE-driven Unsupervised Image Categorization for Optimized Web Delivery

Speech Emotion Recognition Using CNN

Attractive or Not? Beauty Prediction with Attractiveness-Aware Encoders and Robust Late Fusion

A Wtoolbox: Characterizing Audio Information Using Audio Words

ScreenCast in the Wild: Performance and Limitations

One-Pass Video Stabilization on Mobile Devices

You Talkin' to Me? Recognizing Complex Human Interactions in Unconstrained Videos

Instructional Videos for Unsupervised Harvesting and Learning of Action Examples

Beautifying Fisheye Images Using Orientation and Shape Cues

Temporal Fusion Approach Using Segment Weight for Affect Recognition from Body Movements

sTrack: Secure Tracking in Community Surveillance

Searching for Recent Celebrity Images in Microblog Platform

Organizing Video Search Results to Adapted Semantic Hierarchies for Topic-based Browsing

Real-time Summarization for User-generated Videos Based on Semantic Recognition

Hacking Chinese touclick CAPTCHA by Multi-scale Corner Structure Model with Fast Pattern Matching

Orthogonal Gaussian Process for Automatic Age Estimation

Points of Interest Detection from Multiple Sensor-rich Videos in Geo-space

Recognizing Human Activities from Smartphone Sensor Signals

Decoding Auditory Saliency from FMRI Brain Imaging
Crowd Counting via Head Detection and Motion Flow Estimation
Semantic Feature Projection for Continuous Emotion Analysis
Real-time Crowd Detection Based on Gradient Magnitude Entropy Model
Face Recognition from Multiple Images per Subject
Admission Control for Wireless Adaptive HTTP Streaming: An Evidence Theory Based Approach
Matrix Completion for Cross-view Pairwise Constraint Propagation
Cross-media Hashing with Neural Networks
How Your Portrait Impresses People? Inferring Personality Impressions from Portrait Contents
Who's Time Is it Anyway?
Jointly Discovering Fine-grained and Coarse-grained Sentiments via Topic Modeling
A Real-time Smart Assistant for Video Surveillance through Handheld Devices

10:30 – 5:30

Demos 1: Searching & Finding

Session Chair: Shu-Ching Chen, Florida International University, USA

Location: Palm 1

Fine-grained Visual Faceted Search
Real-time Query-by-Image Video Search System
Automatic Real-time Zooming and Panning on Salient Objects from a Panoramic Video
Event Detection in Broadcasting Video for Sports
Wally: A Scalable Distributed Automated Video Surveillance System with Rich Search Functionalities
Deep Search with Attribute-aware Deep Network
Virtual Director Adapting Visual Presentation to Conversation Context in Group Videoconferencing – an Interactive Demo
SmartVisio: Interactive Sketch Recognition with Natural Correction and Editing

- 10:30 – 5:30 Industrial Exhibit**
Location: Palm 1
- 10:30 – 5:30 Art Exhibit**
Location: Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda
 List of exhibits is available on p. 20 of this program
- 12:00 – 2:00 Lunch Break**
Women in SIGMM lunch (by invitation) – Location: Covington Mill Restaurant
ACM TOMM Meeting (by invitation) – Location: Edelweiss
- 2:00 – 3:30 Research Panel 1: Looking for Emotional & Social Signals in Multimedia: Where Art Thou?**
Location: Palm 2
Moderators: Hatice Gunes, Queen Mary University of London, UK
Hayley Hung, Delft University of Technology, Netherlands
- Panelists: Elisabeth Andre, University of Augsburg, Germany**
Dick Bulterman, FXPAL, USA
Alex Hauptmann, CMU, USA
Rainer Lienhart, University of Augsburg, Germany
Nicu Sebe, University of Trento, Italy
- Oral 1: Multimedia Art & Entertainment**
Session Chair: Teresa Chambel, University of Lisbon, Spain
Location: Palm 3
Analysis/Synthesis Approaches for Creatively Processing Video Signals
 Javier Villegas, Angus Graeme Forbes

Exploring Principles-of-Art Features for Image Emotion Recognition

Sicheng Zhao, Yue Gao, Xiaolei Jiang, Hongxun Yao, Tat-Seng Chua, Xiaoshuai Sun

From Writing to Painting: A Kinect-based Cross-modal Chinese Painting Generation System

Jiajia Li, Grace Ngai, Stephen C.F. Chan, Kien A. Hua, Hong Va Leong, Alvin Chan

Gibber: Abstractions for Creative Multimedia Programming

Charles Roberts, Matthew Wright, JoAnn Kuchera-Morin, Tobias Höllerer

Oral 2: Action, Activity, and Event Recognition

Session Chair: Xiang-Sheng Hua, Microsoft, USA

Location: Palm 4

Multiple Features but Few Labels? A Symbiotic Solution Exemplified for Video Analysis

Zhigang Ma, Yi Yang, Nicu Sebe, Alexander G. Hauptmann

Latent Tensor Transfer Learning for RGB-D Action Recognition

Chengcheng Jia, Yu Kong, Zhengming Ding, Yun Raymond Fu

3D Human Activity Recognition with Reconfigurable Convolutional Neural Networks

Keze Wang, Xiaolong Wang, Liang Lin, Meng Wang, Wangmeng Zuo

Dynamic Background Learning through Deep Auto-encoder Networks

Pei Xu, Mao Ye, Xue Li, Qihe Liu, Yi Yang, Jian Ding

Open Source Software Competition – Session 1

Session Chair: Andreas Girgensohn, FXPAL

Location: Palm 5

libLDB: A Library for Extracting Ultrafast and Distinctive Binary Feature Description
Xin Yang, Chong Huang, Tim Cheng

Caffe: Convolutional Architecture for Fast Feature Embedding
Yangqing Jia, Evan Shelhamer, Jeff Donahue, Sergey Karayev, Jonathan Long, Ross Girshick, Sergio Guadarrama, Trevor Darrell

Menpo: A Comprehensive Platform for Parametric Image Alignment and Visual Deformable Models
Joan Alabort-i-Medina, Epameinondas Antonakos, James Booth, Patrick Snape, Stefanos Zafeiriou

3:30 – 4:00 **Break**

4:00 - 5:30 **Oral 3: Music, Speech and Audio**
Session Chair: Cynthia Liem, Delft University of Technology, Netherlands
Location: Palm 3

Music Emotion Recognition by Multi-label Multi-layer Multi-instance Multi-view Learning
Bin Wu, Erheng Zhong, Andrew Horner, Qiang Yang

Song Recommendation for Social Singing Community
Kuang Mao, Ju Fan, Lidan Shou, Gang Chen, Mohan Kankanhalli

“Sheldon Speaking, Bonjour!” – Leveraging Multilingual Tracks for (Weakly) Supervised Speaker Identification
Hervé Bredin, Anindya Roy, Nicolas Pécheux, Alexandre Allauzen

What’s Making That Sound?
Kai Li, Jun Ye, Kien A. Hua

Oral 4: Deep Learning for Multimedia**Session Chair: Apostol Natsev, Google, Inc., USA****Location: Palm 4***Deep Learning for Content-based Image Retrieval: A Comprehensive Study*

Ji Wan, Dayong Wang, Steven Chu Hong Hoi, Pengcheng Wu, Jianke Zhu, Yongdong Zhang, Jintao Li

Exploring Inter-feature and Inter-class Relationships with Deep Neural Networks for Video Classification

Zuxuan Wu, Yu-Gang Jiang, Jun Wang, Jian Pu, Xiangyang Xue

Error-driven Incremental Learning in Deep Convolutional Neural Network for Large-scale Image Classification

Tianjun Xiao, Jiaying Zhang, Kuiyuan Yang, Yuxin Peng, Zheng Zhang

Start from Scratch: Towards Automatically Identifying, Modeling, and Naming Visual Attributes

Hanwang Zhang, Yang Yang, Huanbo Luan, Shuicheng Yang, Tat-Seng Chua

Open Source Software Competition – Session 2**Session Chair: Lynn Wilcox, FXPAL, USA****Location: Palm 5***VideoLat – An Extensible Tool for Multimedia Delay Measurements*

Jack Jansen

The Yael Library

Matthijs Douze, Herve Jégou

Loki+Lire: A Framework to Create Web-based Multimedia Search Engines

Giuseppe Becchi, Marco Bertini, Lorenzo Cioni, Alberto Del Bimbo, Andrea Ferracani, Daniele Pezzatini, Mathias Lux

Wednesday November 5: Conference Day 2

8:30am

SIGMM Award Presentation and Talk

Technical Achievement Award, Rising Star Award, and Best Thesis Award

Talk: Klara Nahrstedt, University of Illinois at Urbana-Champaign

Back and to the Future: Quality Provisioning for Multimedia Content Delivery

Location: Palm

10:00 – 10:30

Break

Setup for posters, demo, industrial exhibit in Palm 1

Setup for art exhibit in Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda

10:30 – 12:00

Grand Challenge Presentations

Session Chair: Cha Zhang, Microsoft Research, USA

Location: Palm 2-5

What are the Fashion Trends in New York?

Shintami C. Hidayati, Kai-Lung Hua, Wen-Huang Cheng, Shih-Wei Sun

Discovering the City by Mining Diverse and Multimodal Data Streams

Yin-Hsi Kuo, Yan-Ying Chen, Bor-Chun Chen, Wen-Yu Lee, Chun-Che Wu, Chia-Hung Lin, Yu-Lin Hou,

Wen-Feng Cheng, Yi-Chih Tsai, Chung-Yen Hung, Liang-Chi Hsieh, Winston Hsu

New Yorker Melange: Interactive Brew of Personalized Venue Recommendations

Jan Zahálka, Stevan Rudinac, Marcel Worring

ATLAS: Automatic Temporal Segmentation and Annotation of Lecture Videos Based on Modelling Transition Time

Rajiv Ratn Shah, Yi Yu, Anwar Dilawar Shaikh, Suhua Tang, Roger Zimmerman

Predicting Viewer Perceived Emotions in Animated GIFs

Brendan Jou, Subhabrata Bhattacharya, Shih-Fu Chang

Context-based Photography Learning Using Crowdsourced Images and Social Media

Yogesh Singh Rawat, Mohan S. Kankanhalli

Virtual Portaitist: Aesthetic Evaluation of Selfies Based on Angle

Mei-Chen Yeh, Hsiao-Wei Lin

Cross Modal Deep Model and Gaussian Process Based Model for MSR-Bing Challenge

Jian Wang, Cuicui Kang, Yonghao He, Shiming Xiang, Chunhong Pan

Bag-of-Words Based Deep Neural Network for Image Retrieval

Yalong Bai, Wei Yu, Tianjun Xiao, Chang Xu, Kuiyuan Yang, Tiejun Zhao, Wei-Ying Ma

Click-through-based Subspace Learning for Image Search

Yingwei Pan, Ting Yao, Xinmei Tian, Houqiang Li, Chong-Wah Ngo

MMSJ Meeting (by invitation)

Location: Edelweiss

10:30 – 5:30

Posters 2

Session Chair: Roy Villafane, Andrews University, USA

Duc Tran, University of Massachusetts at Boston, USA

Location: Palm 1

Presentations: 3:30pm

Modeling the Interest-forgetting Curve for Music Recommendation

Learning to Assess Image Retargeting

Efficient Image Retargeting via Adaptive Pixel Fusion

Learning Compact Face Representation: Packing a Face into an int32

Person Search in a Scene by Jointly Modeling People Commonness and Person Uniqueness

Object Tracking using Reformative Transductive Learning with Sample Variational Correspondence

Multimodal Dynamic Networks for Gesture Recognition

Event Detection Based on Twitter Enthusiasm Degree for Generating a Sports Highlight Video

Boosting Cross-media Retrieval via Visual-auditory Feature Analysis and Relevance Feedback

Transfer in Photography Composition

Eyes Whisper Depression

Just Browsing? Understanding User Journeys in Online TV

Inductive Transfer Deep Hashing for Image Retrieval

What Can We Learn about Motion Videos from Still Images?

Modeling Attributes from Category-Attribute Proportions

Exploiting Correlation Consensus: Towards Subspace Clustering for Multi-modal Data

Learning Multimodal Neural Network with Ranking Examples

Supervised Discriminative Hashing for Compact Binary Codes

Personalized Visual Vocabulary Adaption for Social Image Retrieval

Co-saliency Detection via Base Reconstruction

Automatic Facial Image Annotation and Retrieval by Integrating Voice Label and Visual Appearance

Query-Adaptive Hash Code Ranking for Fast Nearest Neighbor Search

Systematic Assessment of the Video Recording Position for User-Generated Event Videos
BAP: Bimodal Attribute Prediction for Zero-Shot Image Categorization
Building a Self-learning Eye Gaze Model from User Interaction Data
Toward an Estimation of User Tagging Credibility for Social Image Retrieval
Affective Image Retrieval via Multi-Graph Learning
Recognizing Thousands of Legal Entities through Instance-based Visual Classification
Automatic Fine-grained Hyperlinking of Videos Within a Closed Collection Using Scene Segmentation
Automatic Maya Hieroglyph Retrieval Using Shape and Context Information
A Dataset and Taxonomy for Urban Sound Research
Instructive Video Retrieval Based on Hybrid Ranking and Attribute Learning
A Real-time Smart Display Detection System
Pose Maker: A Pose Recommendation System for Person in the Landscape Photographing
Representing Musical Patterns via the Rhythmic Style Histogram Feature
Mobile Photo Album Management with Multiscale Timeline
Interactive Audio Web Development Workflow
What Strikes the Strings of Your Heart?
Fusing Music and Video Modalities Using Multi-timescale Shared Representations
Twitter-driven YouTube Views: Beyond Individual Influencers

10:30 – 5:30

Demos 2: Senses and Sensors

Session Chair: Stefan Göbel, Technische Universität Darmstadt, Germany

Location: Palm 1

Taste+: Digitally Enhancing Taste Sensations of Food and Beverages

Reverbalize: A Crowdsourced Reverberation Controller

SynthAssist: An Audio Synthesizer Programmed with Vocal Imitation

Eat As Much As You Can: A Kinect-based Facial Rehabilitation Game Based on Mouth and Tongue Movements

A Multimedia E-Health Framework Towards an Interactive and Non-invasive Therapy Monitoring Environment

EventEye: Monitoring Evolving Events from Tweet Streams
3D Immersive Cardiopulmonary Resuscitation (CPR) Trainer
Taking Good Selfies on Your Phone

10:30 – 5:30

Industrial Exhibit
Location: Palm 1

10:30 – 5:30

Art Exhibit
Location: Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda
List of exhibits is available on p. 20 of this program

12:00 – 2:00

Lunch Break
Doctoral Symposium lunch (by invitation) – Location: Covington Mill
MMMagazine Meeting (by invitation) – Location: Edelweiss

2:00 – 3:30

Industry Panel: Innovative Multimedia Technologies in Industrial Applications
Location: Palm 2
Chairs: Ivica Rimac, Alcatel Lucent, USA
Borko Furht, Florida Atlantic University, Director of NSF
I/UCRC, USA

Panelists: Borko Furht, Florida Atlantic University, Director of NSF I/UCRC, USA
Jan Bowen, Bell Labs Alcatel-Lucent, USA
Lynn Wilcox, FX Palo Alto Laboratory, USA
David Jaramillo, IBM, USA
Yong Rui, Microsoft Research, USA

Oral 5: Multimedia HCI and QoE**Session Chair: Judith Redi, Delft University of Technology, Netherlands****Location: Palm 3***Perception-guided Multimodal Feature Fusion for Photo Aesthetics Assessment*

Luming Zhang, Yue Gao, Chao Zhang, Hanwang Zhang, Qi Tian, Roger Zimmermann

Impact of Ultra High Definition on Visual Attention

Hiromi Nemoto, Phillipe Hanhart, Pavel Korshunov, Touradj Ebrahimi

An Objective Quality of Experience (QoE) Assessment Index for Retargeted Images

Jiangyang Zhang, C.-C. Jay Kuo

Acceptability-based QoE Management for User-centric Mobile Video Delivery: A Field Study Evaluation

We Song, Dian Tjondronegoro, Ivan Himawan

Oral 6: Multimedia Analysis and Mining**Session Chair: Benoit Huet, Eurecom****Location: Palm 4***Weakly-supervised Image Parsing via Constructing Semantic Graphs and Hypergraphs*

Wenxuan Xie, Yuxin Peng, Jianguo Xiao

Fused One-vs-All Mid-level Features for Fine-grained Visual Categorization

Xiaopeng Zhang, Hongkai Xiong, Wengang Zhou, Qi Tian

Scalable Visual Instance Mining with Threads of Features

Wei Zhang, Hongzhi Li, Chong-Wah Ngo, Shih-Fu Chang

Multi-modal Mutual Topic Reinforce Modeling for Cross-media Retrieval
Yanfei Wang, Fei Wu, Jun Song, Xi Li, Yueting Zhuang

Doctoral Symposium – Session 1

Session Chair: Oge Marques, Florida Atlantic University, USA

Location: Palm 5

Medical Case Retrieval

Mario Taschwer

Panelist: Xavier Giró-I-Nieto

Mobile Video Broadcasting Services – Combining Video Composition and Network Efficient Transmission

Stefan Wilk

Panelist: Laszlo Böszörményi

Music-Information Retrieval in Environments Containing Acoustic Noise

David Grunberg

Panelist: Christian Breiteneder

Automated Multi-Track Mixing and Analysis of Instrument Mixtures

Jeffrey Scott

Panelist: Christian Breiteneder

3:30 – 4:00

Break, Poster 2 Presentations - Location: Palm 1

4:00 - 5:30

Oral 7: Multimedia Systems

Session Chair: Carsten Griwodz, University of Oslo, Norway

Location: Palm 3

Quality-adaptive Prefetching for Interactive Branched Video using HTTP-based Adaptive Streaming
Vengatanathan Krishnamoorthi, Niklas Carlsson, Derek Eager, Anirban Mahanti, Nahid Shahmehri

Self-Organized Inter-Destination Multimedia Synchronization for Adaptive Media Streaming
Benjamin Rainer, Christian Timmerer

Anahita: A System for 3D Video Streaming with Depth Customization

Kiana Calagari, Krzysztof Templin, Tarek Elgamal, Khaled Diab, Piotr Didyk, Wojciech Matusik, Mohamed Hefeeda

LiveRender: A Cloud Gaming System Based on Compressed Graphics Streaming
Li Lin, Xiaofei Liao, Guang Tan, Hai Jin, Xiaobin Yang, Wei Zhang, Bo Li

Oral 8: Emotional and Social Signals in Multimedia

Session Chair: Hayley Hung, Delft University of Technology, Netherlands

Location: Palm 4

We Are Not All Equal: Personalizing Models for Facial Expression Analysis with Transductive Parameter Transfer

Enver Sangineto, Gloria Zen, Elisa Ricci, Nicu Sebe

Object-based Visual Sentiment Concept Analysis and Application

Tao Chen, Felix X. Yu, Jaiwei Chen, Yin Cui, Yan-Ying Chen, Shih-Fu Chang

An Event Driven Fusion Approach for Enjoyment Recognition in Real-time

Florian Lingenfelser, Johannes Wagner, Elisabeth André, Gary McKeown, Will Curran

Correlating Speaker Gestures in Political Debates with Audience Engagement Measured via EEG

John R. Zhang, Jason Sherwin, Jacek Dmochowski, Paul Sajda, John R. Kender

Doctoral Symposium – Session 2

Session Chair: Christian Breiteneder, Vienna University of Technology, Austria

Location: Palm 5

Local Selection of Features for Image Search and Annotation

Jichao Sun

Panelist: Arnold Smeulders

Segmentation and Indexing of Endoscopic Videos

Manfred Jurgen Primus

Panelists: Wallapak Tavanapong and Oge Marques

Learning Recognition of Semantically Relevant Video Segments from Endoscopy Videos Contributed and Edited in a Private School Network

Desara Xhura

Panelist: Vincent Charvillat

Multimodal Alignment of Videos

Mario Guggenberger

Panelist: Hayley Hung

6:30

Conference Banquet and TOMM NG Award Presentation

6:30 – 10:00, Palm 2, 3, 4, 5

Thursday November 6: Conference Day 3

8:30am **Keynote: Rosalind Picard, MIT**
Affective Media and Wearables: Surprising Findings
Location: Palm

10:00 – 10:30 **Break**
Setup for posters, demo, industrial exhibit in Palm 1
Setup for art exhibit in Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda

10:30 – 12:00 **High-Risk High-Return Presentations**
Session Chair: Rainer Lienhart, Augsburg University, Germany
Location: Palm 2

How 'How' Reflects What's What: Content-based Exploitation of How Users Frame Social Images
Michael Riegler, Martha Larson, Mathias Lux, Christoph Kofler

A Group Testing Framework for Similarity Search in High-dimensional Spaces
Miaojing Shi, Teddy Furon, Hervé Jégou

Object Segmentation in Images Using EEG Signals
Eva Mohedano, Graham Healy, Kevin McGuinness, Xavier Giro Nieto, Noel O'Connor, Alan Smeaton

Help Save the Planet: Please Do Adjust Your Picture
Oche Ejembi, Saleem N. Bhatti

Oral 9: Multimedia Applications

Session Chair: Touradj Ebrahimi, EPFL

Location: Palm 3

Media Experience of Complementary Information and Tweets on a Second Screen
Kenta Kusumoto, Teemu Kinnunen, Jari Kätsyri, Heikki Lindroos, Pirkko Oittinen

Interactive Line Drawing Recognition and Vectorization with Commodity Camera
Pradeep Kumar Jayaraman, Chi-Wing Fu

RAPID: Rating Pictorial Aesthetics using Deep Learning
Xin Lu, Zhe Lin, Hailin Jin, Jianchao Yang, James Z. Wang

Fashion Parsing with Video Context
Si Liu, Xiaodan Liang, Luoqi Liu, Ke Lu, Liang Lin, Shuicheng Yan

JMM Meeting (by invitation)

Location: Edelweiss

10:30 – 5:30

Posters 3

Session Chair: Duc Tran, University of Massachusetts at Boston, USA
Roy Villafane, Andrews University, USA

Location: Palm 1

Presentations: 3:30pm

Representing and Recognizing Motion Trajectories: A Tube and Droplet Approach

Multi-modal Language Models for Lecture Video Retrieval

Food Detection and Recognition Using Convolutional Neural Network

Locality Preserving Discriminative Hashing

Augmented Image Retrieval Using Multi-order Object Layout with Attributes
The Stack-of-Rings Interface for Large-scale Image Browsing on Mobile Touch Devices
Automatic Personality and Interaction Style Recognition from Facebook Profile Pictures
Automatic Image Cropping Using Visual Composition, Boundary Simplicity and Content Preservation Models
Mask Assisted Object Coding with Deep Learning for Object Retrieval in Surveillance Videos
Estimate Gaze Density by Incorporating Emotion
Trajectory Based Jump Pattern Recognition in Broadcast Volleyball Videos
Fast Instance Search Based on Approximate Bichromatic Reverse Nearest Neighbor Search
A Robust Panel Extraction Method for Manga
RIFF: Retina-inspired Invariant Fast Feature Descriptor
Stevens' Power Law in 3D Tele-immersion
Multi-view Multi-task Feature Extraction for Web Image Classification
Image Re-ranking with an Alternative Optimization
Automatic Removal of Visual Stop-words
Automatic Image Synthesis from Keywords Using Scene Context
Face-based Automatic Personality Perception
Facial Attribute Space Compression by Latent Human Topic Discovery
Emotional Analysis of Music: A Comparison of Methods
Clothing Retrieval Based on Local Similarity with Multiple Images
Convolutional Network Features for Scene Recognition
Perceived Audio Quality for Streaming Stereo Music
Discriminating Native from Non-native Speech Using Fusion of Visual Cues
A Framework of Mobile Visual Search Based on the Weighted Matching of Dominant Descriptor
Efficient Cross-domain Image Retrieval by Multi-level Matching and Spatial Verification for Structural Similarity
Learning Like a Toddler: Watching Television Series to Learn Vocabulary from Images and Audio

Cuteness Recognition and Localization in the Photos of Animals
A 3D Fingertips Detecting and Tracking Algorithm Based on the Sliding Window
Temporal Dropout of Changes Approach to Convolutional Learning of Spatio-temporal Features
Real-time HDR Panorama Video
Dynamic Resource Management in Cloud-based Distributed Virtual Environments
Interactive 3D Animation Creation and Viewing System Based on Motion Graph and a Pose Estimation Method
Color Transfer Based on Spatial Structure for Telepresence
Human Computer Interface for Quadriplegic People Based on Face Position / Gesture Detection
A Multi-touch DJ Interface with Remote Audience Feedback

10:30 – 5:30

Demos 3: Systems

Session Chair: Carsten Griwodz, Simula Research Laboratory, Norway

Location: Palm 1

WeMash: An Online System for Web Video Mashup
FreeViewer: An Intelligent Director for 3D Tele-immersion System
MiSCon: A Hot Plugging Tool for Real-time Motion-based System Control
CeleLabel: An Interactive System for Annotating Celebrities in Web Videos
FoodCam-256: A Large-scale Real-time Mobile Food Recognition System Employing High-dimensional Features and Compression of Classifier Weights
HDM Viewing Spherical Video Streaming System
Jiku Director 2.0: A Mobile Video Mashup System with Zoom and Pan Using Motion Maps
ClockDrift: A Mobile Application for Measuring Drift in Multimedia Devices

10:30 – 5:30

Industrial Exhibit

Location: Palm 1

10:30 – 5:30

Art Exhibit**Location: Hibiscus/Iris/Poinsettia/Quince/Areca/Veranda**

List of exhibits is available on p. 20 of this program

12:00 – 2:00

Lunch Break**SIGMM Business Meeting (open to all, lunch provided) – Location: Palm 2**

2:00 – 3:30

Research Panel 2: The Future of Audio Multimedia**Location: Palm 2****Moderator: Michael Mandel, the Ohio State University, USA****Panelists: Paris Smaragdís, University of Illinois, Urbana-Champaign****Gerald Friedland, International Computer Science Institute****Josh McDermott, MIT****Youngmoo Kim, Drexel University****Dan Ellis, Columbia University****Oral 10: Privacy, Health, and Well-being****Session Chairs: Jenny Benois-Pineau, University of Bordeaux, France****Wallapak Tavanapong, Iowa State University, USA****Location: Palm 3***Daily Stress Recognition from Mobile Phone Data, Weather Conditions and Individual Traits*

Andrey Bogomolov, Bruno Lepri, Michela Ferron, Fabio Pianesi, Alex (Sandy) Pentland

Validating an iOS-based Rhythmic Auditory Cueing Evaluation (iRACE) for Parkinson's Disease

Shenggao Zhu, Robert J. Ellis, Gottfried Schlaug, Yee Sien Ng, Ye Wang

Towards Efficient Privacy-preserving Image Feature Extraction in Cloud Computing
Zhan Qin, Jingbo Yan, Kui Ren, Chang Wen Chen, Cong Wang

User-level Psychological Stress Detection from Social Media Using Deep Neural Network
Huijie Lin, Jia Jia, Quan Guo, Yuanyuan Xue, Qi Li, Jie Huang, Lianhong Cai, Ling Feng

Oral 11: Multimedia Search and Indexing

Session Chair: Qi Tian, University of Texas, San Antonio, USA

Location: Palm 4

Optimized Distances for Binary Code Ranking

Jianfeng Wang, Heng Tao Shen, Shuicheng Yan, Nenghai Yu, Shipeng Li, Jingdong Wang

Iterative Multi-view Hashing for Cross Media Indexing

Yao Hu, Zhongming Jin, Hongyi Ren, Deng Cai, Xiaofei He

Rescue Tail Queries: Learning to Image Search Re-rank via Click-wise Multimodal Fusion

Xiaopeng Yang, Tao Mei, Yongdong Zhang

Easy Samples First: Self-paced Reranking for Zero-example Multimedia Search

Lu Jiang, Deyu Meng, Teruko Mitamura, Alexander G. Hauptmann

Exchange Meeting (by invitation)

Location: Palm 5

3:30 – 4:00

Break, Poster 2 Presentations - Location: Palm 1

4:00 - 5:30

Oral 12: Social Media and Crowd

Session Chair: Lexing Xie, Australian National University

Location: Palm 3

Mining Cross-network Association for YouTube Video Promotion

Ming Yan, Jitao Sang, Changsheng Xu

One of a Kind: User Profiling by Social Curation

Xue Geng, Hanwang Zhang, Yang Yang

3D Interest Maps from Simultaneous Video Recordings

Axel Carlier, Lilian Calvet, Duong Trung Dung Nguyen, Wei Tsang Ooi, Pierre Gurdjos, Vincent Charvillat

Crowdsourcing a Reverberation Descriptor Map

Prem Seetharaman, Bryan Pardo

Oral 13: Multimedia Recommendations

Session Chair: Shuicheng Yan, National University of Singapore, Singapore

Location: Palm 4

What Videos Are Similar with You? Learning a Common Attributed Representation for Video Recommendation

Peng Cui, Zhiyu Wang, Zhou Su

ADVISOR – Personalized Video Soundtrack Recommendation by Late Fusion with Heuristic Rankings

Rajiv Ratn Shah, Yi Yu, Roger Zimmermann

Social Embedding Image Distance Learning

Shaowei Liu, Peng Cui, Wenwu Zhu, Shiqiang Yang, Qi Tian

Improving Content-based and Hybrid Music Recommendation Using Deep Learning
Xinxi Wang, Ye Wang

5:30 – 6:00

Closing Session (including Best Demo Award announcement)
Location: Palm 2

Friday November 7: Workshops

Breaks at 10:00 and 3:30, Lunch from 12:00 – 2:00, except where noted on the individual workshop programs

HuEvent 2014: Human Centered Event Understanding from Multimedia

8:30-5:30

Location: Palm 3

8:30 – 10:00 Joint Keynote Address (with ISSM 2014): Ramesh Jain, University of California, Irvine, USA

Objective Story Telling

Location: Palm 5

10:30 – 12:00 *Entity Centric Feature Pooling for Complex Event Detection*

Ishani Chakraborty, Hui Cheng, Omar Javed

Skeleton-augmented Human Action Understanding by Learning with Progressively Refined Data

Shih-En Wei, Nick C. Tang, Yen-yu Lin, Ming-Fang Weng, Hong-Yuan Mark Liao

Using Minute-by-Minute Match Report for Semantic Event Annotation in Soccer Video

Zengkai Wang, Junqing Yu

Event Understanding in Endoscopic Surgery Videos

Mario Guggenberger, Michael Riegler, Mathias Lux, Pål Halvorsen

2:00 – 3:00 *Concept-based Image Clustering and Summarization for Event-related Image Collections*

Christina Pappgiannopoulou, Vasileios Mezaris

Sentiment Flow for Video Interestingness Prediction
Sejong Yoon, Vladimir Pavlovic

User Emotion Sensing in Search Process Based on Chromatic Sensation
Tomoko Kajiyama, Shin'ichi Satoh

Investigating Human Factors in Forgery Detection
Parag Shridhar Chandakkar, Baoxin Li

3:30 – 5:30 *On the Personalization of Event-based Systems*
Opher Etzion, Fabiana Forunier

ACM International Workshop on Serious Games

8:30 – 5:30

Location: Palm 4

8:30 – 10:00 Keynote Address: Tom Baranowski, Baylor College, USA
The Five Most Important Research Issues in Effective Game for Health Design (from a Behavioral Scientist's Perspective)

10:30 – 12:00 *Serious Games Development as a Vehicle for Teaching Entertainment Technology and Interdisciplinary Teamwork: Perspectives and Pitfalls*
Ralf Dörner, Ulrike Spierling

Matching Game Mechanics and Human Computation Tasks in Games with a Purpose
Luca Galli

A Method for Simulating Players in a Collaborative Multiplayer Serious Game
Viktor Wendel, Johannes Alef, Stefan Göbel, Ralf Steinmetz

Learning Analytics and Serious Games: Trends and Considerations
Laila Shoukry, Stefan Göbel, Ralf Steinmetz

2:00 – 3:30 *A Natural and Immersive Virtual Interface for the Surgical Safety Checklist Training*
Andrea Ferracani, Daniele Pezzatini, Alberto Del Bimbo

Serious Games in Neurohabilitation: A Systematic Review of Recent Evidence
Josef Wiemeyer

Serious Game Development: Case Study of the 2013 CDC Games for Health Game Jam
Jon A. Preston

4:00 – 5:30 *Lessons Learned from Testing a Children’s Educational Game through Web Deployment*
Michael G. Christel, Scott M. Stevens, Bryan S. Maher, Matthew Champer, Samantha Collier, Ricardo Merchan Benavides, Sean Brice

Study-Town – A Game for Cultural Awareness
Jennifer Bohn, Maximilian Eibl, Arne Berger, Stefanie Müller

What Makes Games Challenging? Considerations on How to Determine the “Challenge” Posed by an Exergame for Balance Training
Sandro Hardy, Angelika Kern, Tim Dutz, Christoph Weber, Stefan Göbel, Ralf Steinmetz

ISMM 2014: 1st International Workshop on Internet-scale Multimedia Management

8:30-5:30

Location: Palm 5

8:30 – 10:00 Joint Keynote Address (with HuEvent 2014): Ramesh Jain, University of California, Irvine, USA
Objective Story Telling

Keynote Address: Xian-Sheng Hua, Microsoft Research, USA
Pushing Image Recognition in the Real-world: Towards Recognizing Millions of Entities

10:30 - 12:00 *Large-scale Aerial Image Categorization by Multi-task Discriminative Topologies Discovery*
Yingjie Xia, Luming Zhang, Suhua Tang

Exploiting Digital Photos and Their Metadata for Social Storytelling from Online Social Networks
Mukesh Kumar Saini, Fatimah Al-Zamzami, Abdulmotaleb El Saddik

Social Popularity Score: Predicting Numbers of Views, Comments, and Favorites of Social Photos Using Annotations
Toshihiko Yamasaki, Shumpei Sano, Kiyoharu Aizawa

2:00 – 3:30 *Bridging the User Intention Gap: An Intelligent and Interactive Multidimensional Music Search Engine*
Shenggao Zhu, Jingli Cai, Jiangang Zhang, Zhonghua Li, Ju-Chiang Wang, Ye Wang

Genre-based Analysis of Social Media Data on Music Listening Behavior: Are Fans of Classical Music Really Averse to Social Media?
Markus Schedl, Marko Tkalcic

#nowplaying Music Data Set: Extracting Listening Behavior from Twitter
Eva Zangerie, Martin Pichl, Wolfgang Gassler, Günther Specht

4:00 – 5:30 Poster Session

Student Performance Evaluation of Multimodal Learning via a Vector Space Model
Subhasree Basu, Yi Yu, Roger Zimmerman

Empirical Observation of User Activities: Check-ins, Venue Photos and Tips in Foursquare
Yi Yu, Suhua Tang, Roger Zimmerman, Kiyoharu Aizawa

The Influence of Audio Quality on the Popularity of Music Videos: A YouTube Case Study
Michael Schoeffler, Jürgen Herre

Monitoring of User Generated Video Broadcasting Services
Denny Stohr, Stefan Wilk, Wolfgang Effelsberg

Automatic Video Intro and Outro Detection on Internet Television
Maryam N. Arani, Xiao-Ping Zhang

A Secure P2P Architecture for Video Distribution
Francisco de Asís Lopez-Fuentes, Carlos Alberto Orta-Cruz

AVEC 2014: The 4th International Audio/Visual Emotion Challenge & Workshop

8:30-5:30

Location: Fuschia

8:30 – 10:00 Keynote Address & Introduction
Speech Modeling for Depression Detection
Julien Epps, University of New South Wales, Australia

AVEC 2014 – 3D Dimensional Affect and Depression Recognition Challenge
Michel Valstar, Bjorn Schuller, Kirsty Smith, Timur Almaev, Florian Eyben, Jarek Krajewski, Roddy Cowie

10:30 – 12:00 *Multi-scale Temporal Modeling for Dimensional Emotion Recognition in Video*
Linlin Chao, Jianhua Tao, Minghao Yang, Ya Li, Zhengqi Wen

Ensemble CCA for Continuous Emotion Prediction
Heysem Kaya, Fazilet Çilli, Albert Ali Salah

Building a Database of Political Speech: Does Culture Matter in Charisma Annotations?
Ailbhe Cullen, Andrew Hines, Naomi Harte

Multimodal Prediction of Affective Dimensions and Depression in Human-computer Interactions
Rahul Gupta, Nikolaos Malandrakis, Bo Xiao, Tanaya Guha, Maarten Van Segbroeck, Matthew Black, Alexandros Potamianos, Shrikanth Narayanan

Inferring Depression and Affect from Application Dependent Meta Knowledge
Markus KSchele, Martin Schels, Friedhelm Schwenker

2:00 – 3:30

Fusing Affective Dimensions and Audio-visual Features from Segmented Video for Depression Recognition

Humberto Pérez Espinosa, Hugo Jair Escalante, Luis Villaseñor-Pineda, Manuel Montes-y-Gomez, David Pinto-Avedaño, Veronica Reyes-Meza

Model Fusion for Multimodal Depression Classification and Level Detection

Mohammed Senoussaoui, Milton Sarria-Paja, João F. Santos, Tiago H. Falk

Vocal and Facial Biomarkers of Depression Based on Motor Incoordination and Timing

James R. Williamson, Thomas F. Quatieri, Brian S. Helfer, Gregory Ciccarelli, Daryush D. Mehta

4:00 – 5:30

Automatic Depression Scale Prediction Using Facial Expression Dynamics and Regression

Asim Jan, Hongying Meng, Yona Falinie A. Gaus, Fan Zhang, Saeed Turabzadeh

Emotion Recognition and Depression Diagnosis by Acoustic and Visual Features: A Multimodal Approach

Maxim Sidorov, Wolfgang Minker

Depression Estimation Using Audiovisual Features and Fisher Vector Encoding

Varun Jain, James L. Crowley, Augustin Lux, Anind K. Dey

The SRI AVEC-2014 Evaluation System

Vikramjit Mitra, Elizabeth Shriberg, Mitchell McLaren, Andrewas Kathol, Colleen Richey, Dimitra Vergyri, Martin Graciarena

WCPR 2014: Workshop on Computational Personality Recognition

8:30 – 12:00

Location: Gardenia

8:30 – 10:00 *A Multivariate Regression Approach to Personality Impression Recognition of Vloggers*
Golnoosh Farnadi, Shanu Sushmita, Geetha Sitaraman, Nhat Ton, Martine De Cock, Sergio Davalos

Evaluating Content-independent Features for Personality Recognition
Ben Verhoeven, Juan Soler Company, Walter Daelemans

Feature Analysis for Computational Personality Recognition Using YouTube Personality Data Set
Chandrima Sarkar, Sumit Bhatia, Arvind Agarwal, Juan Li

Predicting Personality Traits Using Multimodal Information
Firoj Alam, Giuseppe Riccardi

10:30 – 12:00 *The Impact of Affective Verbal Content on Predicting Personality Impressions in YouTube Videos*
Sonja Gievska, Kiril Koroveshovski

Look! Who's Talking? Personality Projection Across Different Social Contexts
Scott Nowson, Alastair J. Gill

ImmersiveME 2014: 2nd International ACM Workshop on Immersive Media Experiences

8:30 – 5:30

Location: Hibiscus

8:30 – 10:00 *Development of a Simple and Low-cost Olfactory Display for Immersive Media Experiences*
Nicolas S. Herrera, Ryan P. McMahan

The Sensation of Taste in the Future of Immersive Media
Nimesha Ranasinghe, Kuan-Yi Lee, Gajan Suthokumar, Ellen Yi-Luen Do

10:30 – 12:00 *ENF Signal Induced by Power Grid: A New Modality for Video Synchronization*
Hui Su, Adi Hajj-Ahmad, Chau-Wai Wong, Ravi Garg, Min Wu

On-display Spatial Audio for Multiple Applications on Large Displays
Sachin Deshpande

Integration of a Precise Indoor Position Tracking Algorithm with an HMD-based Virtual Reality System
Jongkyu Shin, Gwangseok An, Kyogu Lee

2:00 – 3:30 Keynote Address: Christopher Stapleton, Real World Laboratory, USA
Immersion, Imagination & Innovation: Media Immersion Matching the Power of the Imagination to Innovate the Future

4:00 – 5:30 *Transforming Lives through Story Immersion*
Christopher Stapleton, Janet Whiteside, Jim Davies, Dana Mott, Jennifer Vick

Sensory Fiction: A Design Fiction of Emotional Computation
Felix Heibeck, Alexis Hope, Julie Legault

GACE: Gesture and Appearance Cutout Embedding for Gaming Applications
Tam V. Nguyen, Jose Sepulveda, Yong He Tan

Mindful: A Platform for Large-scale Affective Field Research
Guy Feigenblat, Jonathan Herzig, Michal Shmueli-Scheuer, David Konopnicki

EMASC 2014: 1st International ACM Emerging Multimedia Applications and Services for Smart Cities

2:00 – 5:30

Location: Gardenia

2:00 – 3:30

Keynote: Charles E. Hughes, University of Central Florida, USA

Human Surrogates: Remote Presence for Collaboration and Education in Smart Cities

SAIS: Smartphone Augmented Infrastructure Sensing for Public Safety and Sustainability in Smart Cities
Chen-Chih Liao, Ting-Fang Hou, Ting-Yi Lin, Yi-Jun Cheng, Aiman Erbad, Cheng-Hsin Hsu, Nalini Venkatasubramania

A Cloud-assisted Internet of Things Framework for Pervasive Healthcare in Smart City Environment
Mohammad Mehedi Hassan, Hanouf Saad Albakr, Hmood Aldossari

Reducing Traffic Congestion Using Geo-fence Technology: Application for Emergency Car
Shirin Noei, Hugo Santana, Arman Sargolzaei, Mohammadreza Noei

4:00 – 5:30

Invited Talk: Ben A. Amaba, IBM, USA
Industrial and Business Systems for Smart Cities

Detection and Visualization of Emotions in an Affect-aware City
Benjamin Guthier, Rajwa Alharthi, Rana Abaalkhail, Abdulmotaleb El Saddik

Multi-device Interaction for Content Sharing
Valentina Conotter, Guido Grassel, Francesco De Natale

An Intuitive Touch Screen Interface for Car Remote Control
Michael Moski, Pradeep K. Atrey

MAED 2014: Regular and Data Challenge Workshop on Multimedia Analysis for Ecological Data

8:30 – 5:30

Location: Iris

8:30 – 10:00 Keynote Address, Professor Mubarak Shah, University of Central Florida, USA
Detection and Tracking in Crowds

10:30 – 12:00 *Fish Species Identification in Real-life Underwater Images*
Simone Palazzo, Francesca Murabito

Fish Species Recognition from Video Using SVM Classifier
Katy Blanc, Diane Lingrand

Mountain Peak Identification in Visual Content Based on Coarse Digital Elevation Models
Roman Fedorov, Piero Fraternali, Marco Tagliasacchi

2:00 – 3:30 *Toward Knowledge Driven Visual Recognition*
Jia Deng, University of Michigan, USA

4:00 – 5:30 *Crowd-sourcing Applied to Photograph-based Automatic Habitat Classification*
Mercedes Torres Torres, Guoping Qiu

A Typical Day Based Approach to Detrend Solar Radiation Time Series
Luigi Fortuna, Silvia Nunnari, Antonio Gallo

Are Multimedia Identification Tools Biodiversity-friendly?
Alexis Joly, Hervé Goëau, Pierre Bonnet, Concetto Spampinato, Hervé Glotin, Andreas Rauber, Willem-Pier Vellinga, Robert Fisher, Henning Müller

SAM 2014: 3rd International Workshop on Socially-Aware Multimedia

8:30 – 5:30

Location: Poinsettia

8:50 - 9:00: Welcome

9:00 - 10:00: Paper presentations
Cyber Bullying Detection Using Social and Textual Features
Qianjia Huang, Vivek Singh and Pradeep Atrey

Recovering Social Interaction Spatial Structure from Multiple First-person Views
Tian Gan, Yongkang Wong, Bappaditya Mandal, Vijay Chandrasekhar, Liyuan Li, Joo Hwee Lim and Mohan Kankanhalli

The Influence of Interactivity Patterns on the Quality of Experience in Multi-party Video-mediated Conversations under Symmetric Delay Conditions

Marwin Schmitt, Simon Gunkel, Pablo Cesar and Dick Bulterman

- 10:30 - 11:00: Invited Talk: Tat-Seng Chua, National University of Singapore, Singapore
The Multimedia Challenges in Social Media Analytics
- 11:00 - 12:00: Keynote Talk: Karrie Karahalios, University of Illinois at Urbana-Champaign, USA
Visualizing Coordinated Communicative Behavior
- 14:00 - 14:30: Invited Talk: Munmun De Choudhury, Georgia Tech, USA
Role of Social Media in Tackling Challenges in Mental Health
- 14:30 - 15:00: Invited Talk: Aisling Kelliher, Carnegie Mellon University, USA
Critically Aware Multimedia
- 15:00 - 15:30: Invited Talk: Ramesh Jain, University of California, Irvine, USA
The Social in Multimedia
- 15:30 - 16:00: Coffee Break
- 16:00 - 17:00: Keynote Talk: Mor Naaman, Cornell Tech and Seen.co, USA
Attention Rank: Using Social Media to Create Content in the New Information Landscape

PIVP 2014: 1st International Workshop on Perception Inspired Video Processing

9:00 – 5:30

Location: Quince

8:30 - 9:00 Opening Remarks

9:00 - 10:00 Keynote: Paul Sajda, Columbia University, USA
Neural Correlates of Spatiotemporal Event Recognition: Application to Brain-computer Interfaces for Video Exploitation

10:30 - 12:00 *Compressed-domain Correlates of Fixations in Video*
Sayed Hossein Khatoonabadi, Ivan V. Bajic, Yufeng Shan

Classifying Perceptual Experience of Tone-mapped High Dynamic Range Videos through EEG
Seong-Eun Moon, Jong-Seok Lee

A Neurobiological-inspired Stochastic Framework for Video Search and Analysis
Ricky J. Sethi

Attention Retargeting by Color Manipulation in Images
Victor A. Mateescu, Ivan V. Bajic

Geometrical Cues in Visual Saliency Models for Active Object Recognition in Egocentric Videos
Vincent Buso, Jenny Benois-Pineau, Jean-Phillipe Domenger

2:00 - 3:30

Interactive Demos

Can Subliminal Flicker Guide Attention in Natural Images

Victor A. Mateescu, Ivan V. Bajic

Studying the Perceived Quality Variation over Time for Video Quality Assessment

Juan Vicente Talens-Noguera, Hantao Liu

Automatic Pronunciation Assistance on Video

Maria Pantoja

Effect of Subliminal Cueing on In-attentional Blindness

Deepti Pappusetty, Hari Kalva

Object vs. Objectless Motion

Matthew S. Seifert, Howard S. Hock

4:00 - 5:00

Interactive Panel

5:00 - 5:30

Concluding remarks

GeoMM 2014: 3rd ACM Multimedia Workshop on Geotagging and Its Applications in Multimedia

8:30 – 12:00

Location: Lanai

8:30 - 9:05 Keynote Talk: Martha Larson, Delft University of Technology, Netherlands
Geo-location Estimation for Social Multimedia: Towards New Notions of Geo-relevance

9:05 - 9:35 Keynote Talk: David Ayman Shamma, YAHOO!
Place Recognition in Diverse Social Image Collection

9:35 - 9:45 Spotlight presentation of accepted papers

Collaborative Recommendation of Photo-taking Geolocations
Thomas Phan, Jiayu Zhou, Shiyu Chang, Junling Hu, Juhan Lee

User Profiling for Urban Computing: Enriching Social Network Trace Data
Andrea Ferracani, Daniele Pezzatini, Alberto Del Bimbo

Inferring Home Location from User's Photo Collections Based on Visual Content and Mobility Patterns
Danning Zheng, Tianran Hu, Quanzeng You, Henry Kautz, Jiebo Luo

The Placing Task: A Large-scale Geo-estimation Challenge for Social Media Videos and Images
Jaeyoung Choi, Bart Thomee, Gerald Friedland, Liangliang Cao, Karl Ni, Damian Borth, Benjamin Elizalde, Luke Gottlieb, Carmen Carrano, Roger Pearce, Doug Poland

Social Media-based Profiling of Business Locations
Francine Chen, Dhiraj Joshi, Yasuhide Miura, Tomoko Ohkuma

Capture-time Classification of Mobile Sunset Photos Leveraging Strong Spatiotemporal Cues
Ali Almajed, Matthew Boutell

- 9:45 - 10:30 Poster Presentations (Coffee provided from 10:00 - 10:30)
- 10:30 - 11:00 Keynote talk: David Crandall, Indiana University, USA
Place Recognition in Diverse Social Image Collections
- 11:00 - 11:30 Keynote Talk: Jia Li, YAHOO!, USA
Seeing the World Through Pictures: Large Scale Geo-Based Visual Understanding
- 11:30 - 12:00 Keynote Talk: Mubarak Shah, University of Central Florida, USA
Visual Geo-location and Location-aware Image Understanding

CrowdMM 2014: International Workshop on Crowdsourcing for Multimedia

8:30 – 5:30

Location: Magnolia

- 8:30 – 10:00 Keynote: Nhatri Nguyen, Weblabcenter, Inc. – Texas, USA
Crowdsourcing Challenges from Platform Provider's Point of View
- 10:30 – 12:00 *A Protocol for Cross-validating Large Crowdsourced Data: The Case of the LIRIS-ACCEDE Affective Video Dataset*
Yoann Baveye, Christel Chamaret, Emmanuel Dellandréa

Modeling Image Appeal Based on Crowd Preferences for Automated Person-centric Collage Creation
Vassilios Vonikakis, Ramanathan Subramanian, Jonas Arnfred, Stefan Winkler

A Multi-task Learning Framework for Time-continuous Emotion Estimation from Crowd Annotations
Mojtaba Khomami Abadi, Azad Abad, Ramanathan Subramanian, Negar Rostamzadeh, Elisa Ricci, Jagannadan Varadarajan, Nicu Sebe

Crowdsourcing for Rating Image Aesthetic Appeal: Better a Paid or a Volunteer Crowd?
Judith Redi, Isabel Povoia

2:00 – 3:30

Development and Validation of Extrinsic Motivation Scale for Crowdsourcing Micro-task Platforms
Babak Naderi, Ina Wechsung, Tim Polzehl, Sebastian Möller

Users Tagging Visual Moments: Timed Tags in Social Video
Peng Xu, Martha Larson

Crowd-based Semantic Event Detection and Video Annotation for Sports Videos
Fabio Sulser, Ivan Giangreco, Heiko Schuldt

Getting by with a Little Help from the Crowd: Practical Approaches to Social Image Labeling
Babak Loni, Jonathon Hare, Mihai Georgescu, Michael Riegler, Xiaofei Zhu, Mohamed Morchid, Richard Dufour, Martha Larson

Microworkers Crowdsourcing Approach, Challenges and Solutions
Nhatvi Nguyen

4:00 – 5:30

Poster Session

Is that a Jaguar? Segmenting Ancient Maya Glyphs via Crowdsourcing

Gulcan Can, Jean-Marc Odobez, Daniel Gatica-Perez *Making Use of Semantic Concept Detection for Modelling Human Preferences in Visual Summarization*

Stevan Rudinac, Marcel Worring

A Crowdsourcing Procedure for the Discovery of Non-obvious Attributes of Social Images

Mark Melenhorst, María Menéndez Blanco, Martha Larson

A Crowdsourced Data Set of Edited Images Online

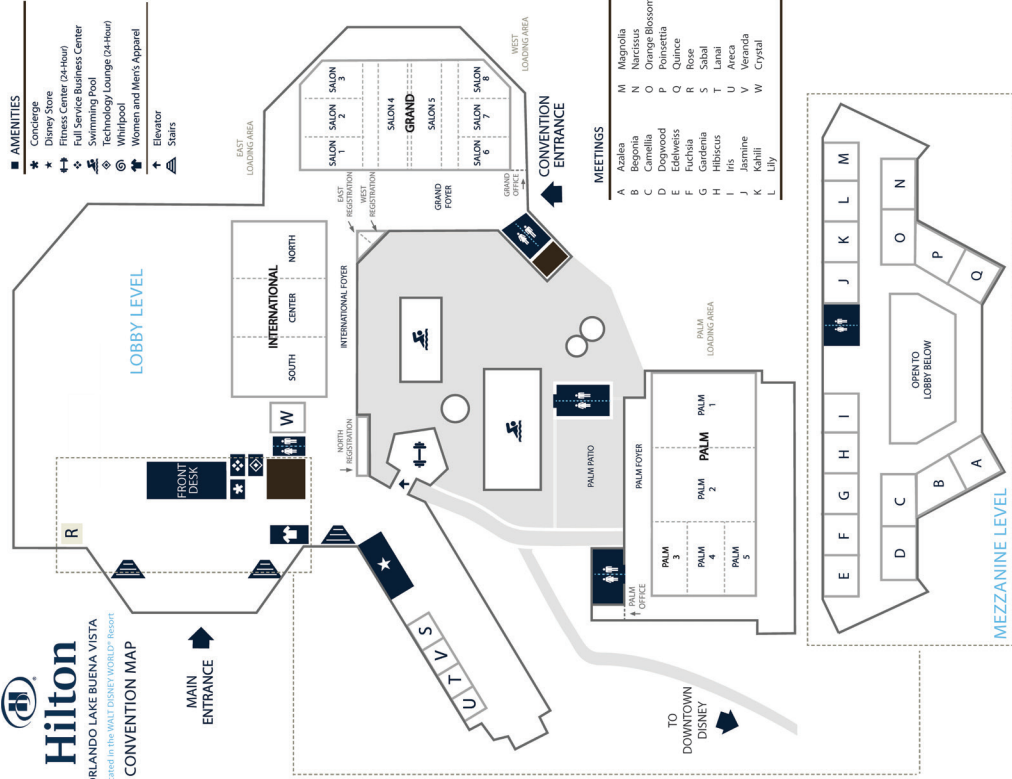
Valentina Conotter, Duc-Tien Dang-Nguyen, Michael Riegler, Guilia Boato, Martha Larson

Click'n'Cut: Crowdsourced Interactive Segmentation with Object Candidates

Axel Carlier, Vincent Charvillat, Amaia Salvador, Xavier Giro-i-Nieto, Oge Marques

Hilton
ORLANDO LAKE BUENA VISTA
 Located in the WALT DISNEY WORLD® Resort

CONVENTION MAP



Thank you to our sponsors!



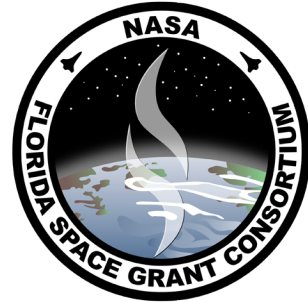
Symantec[™]

Google[™]

Microsoft[®]

Research

FX PAL



Yandex **IBM**
Research

YAHOO!