

# ACM International Conference on Multimedia Retrieval - ICMR 2017

June 6-9, Bucharest, Romania

## Conference program

	June 6 <i>Tutorial &amp; Workshops</i> (UPB's Library/Conference Center)		June 7 <i>Main Conference</i> (AN010 "Radu Voinea")	June 8 <i>Main Conference</i> (AN010 "Radu Voinea")	June 9 <i>Industry Day</i> (AN010 "Radu Voinea")	
08:00-08:40	Registration		Registration	Registration	Registration	08:00-08:40
08:40-08:50			Welcome	Day opening	Day opening	08:40-08:50
08:50-09:40	Tutorial on <b>"Semantic INDEXing"</b> by Georges Quénot Chair: <i>George Awad</i>	<a href="#">Workshop on Multimedia Forensics and Security</a>	Keynote <b>"Searching for a thing"</b> by Arnold W.M. Smeulders and Ran Tao Chair: <i>Cees Snoek</i>	Keynote <b>"Making cultural visits with a smart mate"</b> by Alberto del Bimbo Chair: <i>Nicu Sebe</i>	<a href="#">Industry Keynotes</a> Xiaozheng Huang, Tencent Matei Stroilă, HERE Changhu Wang, Toutiao Chair: <i>Neil O'Hare</i>	08:50-09:40
09:40-10:00			Oral Session 1 <b>Vision and Language</b> Chair: <i>Horia Cucu</i>	Oral Session 5 <b>Best Papers Candidates</b> Chair: <i>Vasileios Mezaris</i>		09:40-10:00
10:00-10:30	Coffee break (at the venue)					10:00-10:30
10:30-10:45	Tutorial on <b>"Zero-Example Video Search"</b> by Chong-Wah Ngo Chair: <i>George Awad</i>	<a href="#">Workshop on Multimedia Forensics and Security</a>	Spotlight presentations	Coffee break (at the venue) in parallel posters of Oral Session 1, 2, and 3		Coffee break (at the venue) in parallel posters of Oral Session 4, and 5
10:45-11:00			Coffee break (at the venue) in parallel posters of Oral Session 1, 2, and 3	Coffee break (at the venue) in parallel posters of Oral Session 4, and 5	10:45-11:00	
11:00-11:30	Tutorial on <b>"Ad Hoc Video Search"</b> by Georges Quénot Chair: <i>George Awad</i>		Special Oral Session <b>Beyond semantics: multimodal understanding of subjective properties</b> Chair: <i>Miriam Redi</i>	Special Oral Session <b>Identifying and Linking Interesting Content in Large Audiovisual Repositories</b> Chairs: <i>Maria Eskevich, Roeland Ordelman</i>	Panel session <b>"Indicators of Innovation and Signs of Success: Recognizing which Multimedia Information Retrieval Research is Most Valuable to Industry"</b> Moderator: <i>Martha Larson</i>	11:00-11:30
11:30-12:15			Oral Session <b>Brave New Ideas</b> Chair: <i>Chong-Wah Ngo</i>			Panel session <b>"Indicators of Innovation and Signs of Success: Recognizing which Multimedia Information Retrieval Research is Most Valuable to Industry"</b> Moderator: <i>Martha Larson</i>
12:15-12:30	Lunch (at the venue)			Closing remarks and presentation of ICMR 2018	12:15-12:30	
12:30-12:50	Lunch (at the venue)		Oral Session <b>Brave New Ideas</b> Chair: <i>Chong-Wah Ngo</i>	Closing remarks and presentation of ICMR 2018	Free evening in Bucharest	12:30-12:50
12:50-13:00						Free evening in Bucharest

13:00-14:00			Lunch (at the venue) in parallel posters of Oral Session 1, 2, and 3	Lunch (at the venue) in parallel posters of Oral Session 4, and 5		13:00-14:00	
14:00-15:00	Tutorial on <b>"Multimedia Event Detection"</b> by Cees Snoek Chair: <i>George Awad</i>	<a href="#">Workshop on Wearable MultiMedia</a>	Oral Session <b>Open Software</b> Chair: <i>Mathias Lux</i>	Oral Session 4 <b>Cross-media Retrieval</b> Chair: <i>Giorgos Tolia</i>		14:00-15:00	
15:00-15:20	Tutorial on <b>"Instance Search"</b> by Shin'ichi Satoh, Duy-Dinh Le, Vinh-Tiep Nguyen Chair: <i>George Awad</i>			Spotlight presentations		15:00-15:20	
15:20-15:40			Oral Session 2 <b>Multimedia Indexing</b> Chair: <i>Adrian Ulges</i>	Coffee break (at the venue)		15:20-15:40	
15:40-16:00		Spotlight presentations		<b>Posters</b> Chair: <i>Petra Galuščáková and Demos</i> Chair: <i>Jaeyoung Choi</i>		Oral Session <b>Doctoral Symposium</b> Chair: <i>Tomas Patrik</i>	15:40-16:00
16:00-16:20	Coffee break (at the venue)						16:00-16:20
16:20-16:30						16:20-16:30	
16:30-16:40	Tutorial on <b>"Video to Text"</b> by Cees Snoek Chair: <i>George Awad</i>	<a href="#">Workshop on Wearable MultiMedia</a>	Coffee break (at the venue) in parallel posters of Oral Session 1, 2, and 3			16:30-16:40	
16:40-17:00				Oral Session 3 <b>Multimedia Applications</b> Chair: <i>Wei-Ta Chu</i>			16:40-17:00
17:00-17:20							
17:20-18:00			Spotlight presentations			17:20-18:00	
18:00-18:05	<a href="#">Welcome Reception</a>			<a href="#">Gala Dinner</a>	18:00-18:05		
18:05-18:20					18:05-18:20		
18:20-					18:20-		

## **ORAL SESSION 1: Vision and Language**

**Session Chair: Horia Cucu**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **9:40-10:45 Oral presentations**

*Shizhe Chen, Jia Chen and Qin Jin,*  
Generating Video Descriptions with Topic Guidance

*Christian Andreas Henning and Ralph Ewerth,*  
Estimating the Information Gap between Textual and Visual Representations

*Kan Chen, Rama Kovvuri, Jiyang Gao and Ram Nevatia,*  
MSRC: Multimodal Spatial Regression with Semantic Context for Phrase Grounding

*Junwei Liang, Lu Jiang, Deyu Meng and Alexander Hauptmann,*  
Leveraging Multi-modal Prior Knowledge for Large-scale Concept Learning in Noisy Web Data

### **10:45-11:00 Spotlight presentations**

*Xing Xu, Fumin Shen, Yang Yang, Jie Shao and Zi Huang,*  
Transductive Visual-Semantic Embedding for Zero-shot Learning

*Ricardo Carrapiço, Isabel Guimarães, Margarida Grilo, Sofia Cavaco and Joao Magalhães,*  
3D Facial Video Retrieval and Management for Decision Support in Speech and Language Therapy

*Thomas Mensink, Thomas Jongstra, Pascal Mettes and Cees G.M. Snoek,*  
Music-Guided Video Summarization using Quadratic Assignments

## **SPECIAL ORAL SESSION: Beyond Semantics: Multimodal Understanding of Subjective Properties**

**Session Chair: Miriam Redi**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **11:30-12:15 Oral presentations**

*Darshan Santani, Salvador Ruiz-Correa and Daniel Gatica-Perez,*  
Insiders and Outsiders: Comparing Urban Impressions between Population Groups

*Claudio Baecchi, Tiberio Uricchio, Marco Bertini and Alberto Del Bimbo,*  
Deep Sentiment Features of Context and Faces for Affective Video Analysis

*Jiarui Gao, Yanwei Fu, Yu-Gang Jiang and Xiangyang Xue,*  
Frame-Transformer Emotion Classification Network

## **ORAL SESSION: Brave New Ideas**

**Session Chair: Chong-Wah Ngo**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **12:15-13:00 Oral presentations**

*Jaeyoung Choi, Martha Larson, Xinchao Li, Kevin Li, Gerald Friedland and Alan Hanjalic,*  
The Geo-Privacy Bonus of Popular Photo Enhancements

*Eduardo Nigri and Ognjen Arandjelovic,*  
Light Curve Analysis From Kepler Spacecraft Collected Data

*Nitish Nag, Vaibhav Pandey and Ramesh Jain,*  
Health Multimedia: Lifestyle Recommendations Based on Diverse Observations

## **ORAL SESSION: Open Software**

**Session Chair: Mathias Lux**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **14:00-15:20 Oral presentations**

*Lucas Pascotti Valem and Daniel Carlos Guimarães Pedronette,*  
An Unsupervised Distance Learning Framework for Multimedia Retrieval

*Konstantin Pogorelov, Michael Riegler, Pål Halvorsen and Carsten Griwodz,*  
ClusterTag: Interactive Visualization, Clustering and Tagging Tool for Big Image Collections

*Chris A. Mattmann and Madhav Sharan,*  
Scalable Hadoop-Based Pooled Time Series of Big Video Data from the Deep Web

*Federico Bartoli, Giuseppe Lisanti, Lorenzo Seidenari and Alberto Del Bimbo,*  
PACE: Prediction-based Annotation for Crowded Environments

## **ORAL SESSION 2: Multimedia Indexing**

**Session Chair: Adrian Ulges**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **15:20-16:20 Oral presentations**

*Rao Muhammad Anwer, Fahad Shahbaz Khan, Joost van de Weijer and Jorma Laaksonen,*  
TEX-Nets: Binary Patterns Encoded Convolutional Neural Networks for Texture Recognition

*Jie Lin, Olivier Morère, Antoine Veillard, Ling-Yu Duan, Hanlin Goh and Vijay Chandrasekhar,*  
DeepHash for Image Instance Retrieval: Getting Regularization, Depth and Fine-Tuning Right

*André Mourão and Joao Magalhães,*  
Balanced Search Space Partitioning for Distributed Media Redundant Indexing

*Dayan Wu, Zheng Lin, Bo Li, Mingzhen Ye and Weiping Wang,*  
Deep Supervised Hashing for Multi-Label and Large-Scale Image Retrieval

### **16:20-16:40 Spotlight presentations**

*Fabien André, Anne-Marie Kermarrec and Nicolas Le Scouarnec,*  
Accelerated Nearest Neighbor Search with Quick ADC

*Christian Eggert, Dan Zecha, Stephan Brehm and Rainer Lienhart,*  
Improving Small Object Proposals for Company Logo Detection

*Rui Yang, Yuliang Shi and Xin-Shun Xu,*  
Discrete Multi-view Hashing for Effective Image Retrieval

*Omar Seddati, Stéphane Dupont and Saïd Mahmoudi,*  
Quadruplet Networks for Sketch-Based Image Retrieval

## **ORAL SESSION 3: Multimedia Applications**

**Session Chair: Wei-Ta Chu**

**Wednesday, June 7, AN010 “Radu Voinea”**

### **17:00-18:05 Oral presentations**

*Karthik Yadati, Cynthia C. S. Liem, Martha Larson and Alan Hanjalic,*  
On the Automatic Identification of Music for Common Activities

*Martin Pichl, Eva Zangerle and Günther Specht,*  
Improving Context-Aware Music Recommender Systems: Beyond the Pre-filtering Approach

*Michal Koperski, Slawomir Bak and Peter Carr,*  
Groups Re-identification with Temporal Context

*Ionuț C. Duță, Bogdan Ionescu, Kiyoharu Aizawa and Nicu Sebe,*  
Simple, Efficient and Effective Encodings of Local Deep Features for Video Action Recognition

### **18:05-18:20 Spotlight presentations**

*Olga Slizovskaia, Emilia Gómez and Gloria Haro,*

Musical Instrument Recognition in User-generated Videos using a Multimodal Convolutional Neural Network Architecture

*Gijs Overgoor, Masoud Mazloom, Marcel Worring, Robert Rietveld and Willemijn van Dolen,*

A Spatio-Temporal Category Representation for Brand Popularity Prediction

*Miriam Redi, Frank Z. Liu and Neil O'Hare,*

Bridging the Aesthetic Gap: The Wild Beauty of Web Imagery

### **ORAL SESSION 5: Best Papers Candidates**

**Session Chair: Vasileios Mezaris**

**Thursday, June 8, AN010 “Radu Voinea”**

#### **9:40-11:00 Oral presentations**

*Mohammad Soleymani, Michael Riegler and Pål Halvorsen,*

Multimodal Analysis of Image Search Intent - Intent Recognition in Multimedia Search from User Behavior and Multimedia Content

*Olivier Morere, Jie Lin, Antoine Veillard, Ling-Yu Duan, Vijay Chandrasekhar and Tomaso Poggio,*

Nested Invariance Pooling and RBM Hashing for Image Instance Retrieval

*Yusuke Uchida, Yuki Nagai, Shigeyuki Sakazawa and Shin'ichi Satoh,*

Embedding Watermarks into Deep Neural Networks

*Christina Boididou, Symeon Papadopoulos, Lazaros Apostolidis and Yiannis Kompatsiaris,*

Learning to Detect Misleading Content on Twitter

### **SPECIAL ORAL SESSION: Identifying and Linking Interesting Content in Large Audiovisual Repositories**

**Session Chairs: Maria Eskevich and Roeland Ordelman**

**Thursday, June 8, AN010 “Radu Voinea”**

#### **11:30-13:00 Oral presentations**

*Zhi-Qi Cheng, Hao Zhang, Xiao Wu and Chong-Wah Ngo,*

On the Selection of Anchors and Targets for Video Hyperlinking

*Petra Galuščáková, Michal Batko, Jan Čech, Jiří Matas, David Novák and Pavel Pecina,*

Visual Descriptors in Methods for Video Hyperlinking

*Rémi Bois, Guillaume Gravier, Eric Jamet, Emmanuel Morin, Maxime Robert and Pascale Sébillot,*

Linking Multimedia Content for Efficient News Browsing

*Yang Liu, Zhonglei Gu, Yiu-Ming Cheung and Kien A. Hua,*  
Multi-view Manifold Learning for Media Interestingness Prediction

*Keith Curtis, Gareth J.F. Jones and Nick Campbell,*  
Utilising High-Level Features in Summarisation of Academic Presentations

## **ORAL SESSION 4: Cross-media Retrieval**

**Session Chair: Giorgos Tolias**

**Thursday, June 8, AN010 “Radu Voinea”**

### **14:00-15:00 Oral presentations**

*Aliaksandr Siarohin, Gloria Zen, Cveta Majtanovic, Xavier Alameda-Pineda, Elisa Ricci and Nicu Sebe,*  
How to Make an Image More Memorable? A Deep Style Transfer Approach

*Fabian Junkert, Markus Eberts, Adrian Ulges and Ulrich Schwanecke,*  
Cross-modal Image-Graphics Retrieval by Neural Transfer Learning

*Samet Hicsonmez, Nermin Samet, Fadime Sener and Pinar Duygulu,*  
DRAW: Deep Networks for Recognizing Styles of Artists Who Illustrate Children’s Books

*Ines Chami, Youssef Tamaazousti and Hervé Le Borgne,*  
AMECON: Abstract Meta-Concept Features for Text-Illustration

### **15:00-15:20 Spotlight presentations**

*Elaheh Momeni, Reza Rawassizadeh and Eytan Adar,*  
Leveraging Semantic Facets for Adaptive Ranking of Social Comments

*Zhanxiong Wang, Keke He, Yanwei Fu, Rui Feng, Yu-Gang Jiang and Xiangyang Xue,*  
Multi-task Deep Neural Network for Joint Face Recognition and Facial Attribute Prediction

*Kuikui Wang, Lu Yang, Gongping Yang, Xin Luo, Kun Su and Yilong Yin,*  
Finger Vein Image Retrieval via Coding Scale-varied Superpixel Feature

*Haoyue Shi, Jia Chen and Alexander G. Hauptmann,*  
Joint Saliency Estimation and Matching using Image Regions for Geo-Localization of Online Video

## POSTERS

**Session Chair: Petra Galuščáková**

**Thursday, June 8, Hallway**

**15:40-18:00**

*Ahmet Iscen, Giorgos Tolias, Yannis Avrithis, Teddy Furon and Ondrej Chum,*  
Panorama to Panorama Matching for Location Recognition

*Damianos Galanopoulos, Foteini Markatopoulou, Vasileios Mezaris and Ioannis Patras,*  
Concept Language Models and Event-based Concept Number Selection for Zero-example Event Detection

*Shilun Lin, Pengfei Xiong and Hailong Liu,*  
Tiny Transform Net for Mobile Image Stylization

*Foteini Markatopoulou, Damianos Galanopoulos, Vasileios Mezaris and Ioannis Patras,*  
Query and Keyframe Representations for Ad-hoc Video Search

*Wei-Ta Chu and Wei-Wei Li,*  
Manga FaceNet: Face Detection in Manga based on Deep Neural Network

*Vedran Vukotić, Christian Raymond and Guillaume Gravier,*  
Generative Adversarial Networks for Multimodal Representation Learning in Video Hyperlinking

*Giuseppe Amato, Fabio Carrara, Fabrizio Falchi and Claudio Gennaro,*  
Efficient Indexing of Regional Maximum Activations of Convolutions using Full-Text Search Engines

*Junkang Zhang, Siyu Xia, Ming Shao and Yun Fu,*  
Family Photo Recognition via Multiple Instance Learning

*Shan Sun, Feng Wang, Qi Liang and Liang He,*  
TaiChi: A Fine-Grained Action Recognition Dataset

*Keiji Yanai and Ryosuke Tanno,*  
Conditional Fast Style Transfer Network

*Anuvabh Dutt, Denis Pellerin and Georges Quénot,*  
Improving Image Classification using Coarse and Fine Labels

*Mridula Verma and Kaushal Kumar Shukla,*  
Fast Multi-Modal Unified Sparse Representation Learning



*Wei-Ta Chu and Samuel Situmeang,*  
Badminton Video Analysis based on Spatiotemporal and Stroke Features

*Xing Xu, Fumin Shen, Yang Yang, Jie Shao and Zi Huang,*  
Transductive Visual-Semantic Embedding for Zero-shot Learning

*Ricardo Carrapiço, Isabel Guimarães, Margarida Grilo, Sofia Cavaco and Joao Magalhães,*  
3D Facial Video Retrieval and Management for Decision Support in Speech and Language Therapy

*Thomas Mensink, Thomas Jongstra, Pascal Mettes and Cees G.M. Snoek,*  
Music-Guided Video Summarization using Quadratic Assignments

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*Haoyue Shi, Jia Chen and Alexander G. Hauptmann,*  
Joint Saliency Estimation and Matching using Image Regions for Geo-Localization of Online Video

## **DEMONSTRATIONS**

**Session Chair: Jaeyoung Choi**

**Thursday, June 8, Hallway**

**15:40-18:00**

*Andrea Ceroni, Vassilios Solachidis, Claudia Niederée, Olga Papadopoulou and Vasileios Mezaris,*  
Expo: An Expectation-oriented System for Selecting Important Photos from Personal Collections

*Luca Rossetto, Ivan Giangreco, Claudiu Tănase and Heiko Schuldt,*  
Multimodal Video Retrieval with the 2017 IMOTION System

*Kashif Ahmad, Michael Riegler, Ans Riaz, Nicola Conci, Duc-Tien Dang-Nguyen and Pål Halvorsen,*  
The JORD System - Linking Sky and Social Multimedia Data to Natural Disasters

*Mathias Lux, Michael Riegler, Pål Halvorsen and Glenn MacStravic,*  
LireSolr - A Visual Information Retrieval Server

*Chrysa Collyda, Evlampios Apostolidis, Alexandros Pournaras, Foteini Markatopoulou, Vasileios Mezaris and Ioannis Patras,*  
VideoAnalysis4ALL: An On-line Tool for the Automatic Fragmentation and Concept-based Annotation, and the Interactive Exploration of Videos

*Kai Uwe Barthel, Nico Hezel and Klaus Jung,*  
Visually Browsing Millions of Images Using Image Graphs

## **ORAL SESSION: Doctoral Symposium**

**Session Chair: Tomas Piatrik**

**Thursday, June 8, AN010 "Radu Voinea"**

**15:40-17:00 Oral presentations**

*Shengsheng Qian, Tianzhu Zhang and Changsheng Xu,*  
A Generic Framework for Social Event Analysis

*Stefan Petschornig,*  
Semi-Automatic Retrieval of Relevant Segments from Laparoscopic Surgery Videos

*Yash Garg and Silvestro Roberto Poccia,*  
On the Effectiveness of Distance Measures for Similarity Search in Multi-Variate Sensory Data

*Karim Aderghal, Jenny Benois-Pineau and Karim Afdel,*

Classification of sMRI for Alzheimer's disease Diagnosis with CNN: Single Siamese Networks with 2D+epsilon Approach and Fusion on ADNI

## **INDUSTRY KEYNOTES**

**Session Chair: Neil O'Hare**

**Friday, June 9, AN010 "Radu Voinea"**

**8:50-11:00**

*Xiaozheng Huang, Tencent*

With 5G Approaching, How will Audio/Video Technology that Serves 800 Million QQ Users Bring Forth New Ideas

*Matei Stroilă, HERE*

Information Retrieval from Multi-Sensor Data for Enriching Location Services at HERE Technologies

*Changhu Wang, Toutiao*

Intelligently Connecting People with Information

## **PANEL SESSION**

**Moderator: Martha Larson**

**Friday, June 9, AN010 "Radu Voinea"**

**11:30-12:30**

*Vasileios Mezaris, CERTH, Greece, Matei Stroilă, HERE, USA,*

*Ramesh Jain, University of California, Irvine, USA, Changhu Wang, Toutiao AI Lab, China,*

Indicators of Innovation and Signs of Success: Recognizing which Multimedia Information Retrieval Research is Most Valuable to Industry