

CIVR 2005

**International Conference on
Image and Video Retrieval**
July 20-22, 2005 Singapore

TECHNICAL PROGRAMME

CIVR 2005

CIVR aims to provide an international forum for the discussion of research challenges and the exchange of ideas among researchers and practitioners in image/video retrieval technologies. It addresses innovative research in the broad field of image and video retrieval. A unique feature of the conference is the high level of participation from practitioners.

The previous CIVR conferences were held in: England (2002), USA (2003) and Ireland (2004). **CIVR 2005** will take place in Singapore in July 20-22, 2005. CIVR 2006 has been planned for Arizona, USA.

Audience: The conference should be of interests to researchers, software and application developers, and information technologists.

Organized by:
School of Computing, National University of Singapore

In Cooperation with:
ACM SIGIR
IEE
Singapore Computer Society

PROGRAM OVERVIEW

20 July 2005 (Wednesday) (LT34, SOC1, Level 3)	
0815 – 1700	REGISTRATION
0850 – 0905	OPENING
0905 – 0945	Invited Talk 1 Alexander G. Hauptmann (Carnegie Mellon University): Lessons for the Future from a Decade of Informedia Video Analysis Research
0945 – 1035	Paper Session 1: Video Retrieval Techniques
1035 – 1100	Morning Tea
1100 – 1240	Paper Session 2: Video Story Segmentation and Event Detection
1240 – 1350	LUNCH
1350 – 1440	Paper Session 3: Semantics in Video Retrieval
1440 – 1520	Poster Presentation 1: Video Processing, Retrieval and Multimedia Systems
1520 – 1630	Afternoon Tea and Poster Display Session 1
1630 – 1745	Paper Session 4: Image Indexing and Retrieval
21 July 2005 (Thursday) (LT34, SOC1, Level 3)	
0815 – 1700	REGISTRATION
0900 – 0945	Invited Talk 2 Alan F. Smeaton (Dublin City University): Large Scale Evaluations of Multimedia Information Retrieval: The TRECVID Experience
0945 – 1030	Poster Presentation 2: Image Feature Extraction, Indexing and Retrieval
1030 – 1130	Morning Tea and Poster Display Session 2
1130 – 1245	Paper Session 5: Image/Video Annotation and Clustering
1245 – 1400	LUNCH
1400 – 1445	Invited Talk 3 Susanne Boll (University of Oldenburg): Image and Video Retrieval from a User-Centered Mobile Multimedia Perspective
1445 – 1535	Paper Session 6: Interactive Video Retrieval and Others
1535 – 1600	Afternoon Tea
1600 – 1715	Paper Session 7: Image/Video Retrieval Applications
1730 – 2200	CONFERENCE BANQUET (Night Safari)

22 July 2005 (Friday) (LT34, SOC1, Level 3)	
0830 – 1000	REGISTRATION
0900 – 0945	Invited Talk 4 John R. Smith (IBM T. J. Watson Research Center): Multimedia Research Challenges for Industry
0945 – 1035	Industrial Session 1
1035 – 1050	Morning Tea
1050 – 1135	Keynote Industrial Talk Ramesh Jain (University of California at Irvine): Practical Applications of Multimedia Search
1135 – 1250	Industrial Session 2
1250 – 1300	CLOSING
1300 – 1330	Networking Session with Lunch

0815 – 1700: REGISTRATION**0850 – 0905: OPENING**

Welcome Message and Program Overview: Conference Co-Chairs
Tat-Seng Chua and Wei-Ying Ma
(National University of Singapore/ Microsoft Research Asia)

0905 – 0945: INVITED TALK 1

Chair: *Mohan Kankanhalli (National University of Singapore)*

Alexander G. Hauptmann: *Lessons for the Future from a Decade of Informedia Video Analysis Research* (Carnegie Mellon University)

0945 – 1035: PAPAR SESSION 1: Video Retrieval Techniques

Chair: *Mohan Kankanhalli (National University of Singapore)*

Kieran Mc Donald & Alan F. Smeaton: *A Comparison of Score, Rank and Probability-based Fusion Methods for Video Shot Retrieval* (Dublin City University)

Yuxin Peng & Chong-Wah Ngo: *EMD-Based Video Clip Retrieval by Many-to-Many Matching* (Peking University/ City University of Hong Kong)

1035 – 1100: MORNING TEA**1100 – 1240: PAPER SESSION 2: Video Story Segmentation and Event Detection**

Chair: *Alan F. Smeaton (Dublin City University)*

Winston H. Hsu & Shih-Fu Chang: *Visual Cue Cluster Construction via Information Bottleneck Principle and Kernel Density Estimation* (Columbia University)

Yun Zhai, Alper Yilmaz & Mubarak Shah: *Story Segmentation in News Videos Using Visual and Text Cues* (University of Central Florida)

Joaquim Arlandis, Paul Over & Wessel Kraaij: *Boundary Error Analysis and Categorization in the TRECVID News Story Segmentation Task* (NIST/ TNO Science & Industry)

Tae Meon Bae, Cheon Seog Kiim, Sung Ho Jin, Ki Hyun Kim & Yong Man Ro: *Semantic Event Detection in Structured Video Using Hybrid HMM/SVM* (Information and Communications University)

1240 – 1350: LUNCH**1350 – 1440: PAPER SESSION 3: Semantics in Video Retrieval**

Chair: *Marcel Worring (University of Amsterdam)*

Dawei Ding, Jun Yang, Qing Li, Wenyin Liu & Liping Wang: *What Can Expressive Semantics Tell: Retrieval Model for a Flash-Movie Search Engine* (City University of Hong Kong/ Carnegie Mellon University)

Michael G. Christel & Alexander G. Hauptmann: *The Use and Utility of High-Level Semantic Features in Video Retrieval* (Carnegie Mellon University)

1440 – 1520: POSTER PRESENTATION 1

Chair: *Clement Chia (Nanyang Technological University)*

Video Processing, Retrieval and Multimedia Systems

- P1-1 Yuxin Peng & Chong-Wah Ngo: *Hot Event Detection and Summarization by Graph Modeling and Matching* (Peking University/ City University of Hong Kong)
- P1-2 Dan Song, Hai Tao Liu, Miyoung Cho, Hanil Kim & Pankoo Kim: *Domain Knowledge Ontology Building for Semantic Video Event Description* (Chosun University)
- P1-3 Sang-Kyun Kim, Doo Sun Hwang, Ji-Yeun Kim & Yang-Seock Seo: *An Effective News Anchorperson Shot Detection Method Based on Adaptive Audio/Visual Model Generation* (Samsung Advanced Institute of Technology)
- P1-4 Bart Lehane, Noel O'Connor & Noel Murphy: *Dialogue Sequence Detection in Movies* (Dublin City University)
- P1-5 Gamhewage C. de Silva, Takayuki Ishikawa, Toshihiko Yamasaki & Kiyoharu Aizawa: *Person Tracking and Multicamera Video Retrieval Using Floor Sensors in a Ubiquitous Environment* (University of Tokyo)
- P1-6 Siba Haidar, Philippe Joly & Bilal Chebaro: *Style Similarity Measure for Video Documents Comparison* (IRIT - UPS – Toulouse/ Lebanese University)
- P1-7 Walter Nunziati, Stan Sclaroff & Alberto Del Bimbo: *An Invariant Representation for Matching Trajectories across Uncalibrated Video Streams* (Universita' di Firenze/ Boston University)
- P1-8 Nafiz Arica: *Cyclic Sequence Comparison Using Dynamic Warping* (Turkish Naval Academy)
- P1-9 Cuneyt Akinlar & Sarit Mukherjee: *Design and Implementation of a Bandwidth Sensitive Distributed Continuous Media File System Using the Fibre Channel Network* (Anadolu University/ Lucent Technologies)
- P1-10 Kwangjin Hong & Keechul Jung: *Advanced Documents Authoring Tool* (Soongsil University)
- P1-11 Andrea Cerri, Massimo Ferri & Daniela Giorgi: *A Complete Keypics Experiment with Size Functions* (University of Bologna)
- P1-12 Bo-Ra Seok, Yong-Ho Hwang & Hyun-Ki Hong: *Using Projective Invariant Properties for Efficient 3D Reconstruction* (Chung-Ang University)
- P1-13 Sun K. Yoo, Jaehong Key, Kuiwon Choi & Jinho Jo: *Web-Based Hybrid Visualization of Medical Images* (Yonsei University/ Korean Institute of Science & Technology)
- P1-14 Takanori Yokoyama, Toshinori Watanabe & Hisashi Koga: *Similarity-Based Retrieval Method for Fractal Coded Images in the Compressed Data Domain* (University of Electro-Communications)
- P1-15 Li Tao and Vijayan K. Asari: *A Robust Image Enhancement Technique for Improving Image Visual Quality in Shadowed Scenes* (Old Dominion University)
- P1-16 Eunjung Han, Anjin Park & Keechul Jung: *Contents Recycling using Content-based Image Retrieval on Mobile Device* (Soongsil University)
- P1-17 Peter Howarth & Stefan Rüger: *Trading Precision for Speed: Localised Similarity Functions* (Imperial College London)
- P1-18 Li-Wei Chan, Cheng-Chieh Chiang & Yi-Ping Hung: *Content-Based Object Movie Retrieval by Use of Relevance Feedback* (National Taiwan University)
- P1-19 Simon Goodall, Paul Lewis & Kirk Martinez: *Towards Automatic Classification of 3-D Museum Artifacts using Ontological Concepts* (University of Southampton)
- P1-20 Jun Feng & Horace H. S. Ip: *Chi-Square Goodness-of-Fit Test of 3D Point Correspondence for Model Similarity Measure and Analysis* (City University of Hong Kong)

1520 – 1630: AFTERNOON TEA and POSTER DISPLAY SESSION 1

1630 – 1745: PAPER SESSION 4: Image Indexing and Retrieval

Chair: *Alexander G. Hauptmann (Carnegie Mellon University)*

Eric Spellman & Baba C. Vemuri: *Efficient Shape Indexing Using an Information Theoretic Representation* (University of Florida)

Javier Bracamonte, Michael Ansorge, Fausto Pellandini & Pierre-Andre Farine: *Efficient Compressed Domain Target Image Search and Retrieval* (University of Neuchatel)

Li Wu & Timo Bretschneider: *An Effective Multi-dimensional Index Strategy for Cluster Architectures* (Nanyang Technological University)

TECHNICAL PROGRAMME – Thursday
(Venue: LT34, SOC1, Level 3, NUS)

21 July, 2005

0900 – 0945: INVITED TALK 2

Chair: *Ee-Chien Chang (National University of Singapore)*

Alan F. Smeaton: *Large Scale Evaluations of Multimedia Information Retrieval: The TRECVID Experience* (Dublin City University)

0945 – 1030: POSTER PRESENTATION 2

Chair: *Terence Sim (National University of Singapore)*

Image Feature Extraction, Indexing and Retrieval

- P2-1 Nacwoo Kim, Taeyong Kim & Jongsoo Choi: *Edge-Based Spatial Descriptor for Content-Based Image Retrieval* (Chung-Ang University)
- P2-2 Sangoh Jeong: *Distributional Distances in Color Image Retrieval with GMVQ-Generated Histograms* (Stanford University)
- P2-3 Qing Wang & David Feng: *A Novel Texture Descriptor Using Over-Complete Wavelet Transform and its Fractal Signature* (Northwestern Polytechnical University/ The University of Sydney)
- P2-4 Cheng-Chieh Chiang, Ming-Han Hsieh, Yi-Ping Hung & Greg C. Lee: *Region Filtering Using Color and Texture Features for Image Retrieval* (National Taiwan Normal University/ National Taiwan University)
- P2-5 Peter G. B. Enser, Christine J. Sandom & Paul H. Lewis: *Automatic Annotation of Images from the Practitioner Perspective* (University of Brighton/ University of Southampton)
- P2-6 Alexei Yavlinsky, Edward Schofield & Stefan Ruger: *Automated Image Annotation Using Global Features and Robust Nonparametric Density Estimation* (Imperial College London)
- P2-7 Markus Koskela & Jorma Laaksonen: *Semantic Annotation of Image Groups with Self-organizing Maps* (Helsinki University of Technology)
- P2-8 Mohammed Belkhatir, Philippe Mulhem & Yves Chiaramella: *A Conceptual Image Retrieval Architecture Combining Keyword-Based Querying with Transparent and Penetrable Query-by-Example* (IMAG-CNRS)
- P2-9 Jonathon S. Hare & Paul H. Lewis: *On Image Retrieval using Salient Regions with Vector-Spaces and Latent Semantics* (University of Southampton)

- P2-10 Minhwan Kim, Changmin Park & Kyongmo Koo: *Natural/Man-Made Object Classification Based on Gabor Characteristics* (Pusan National University/ Youngsan University)
- P2-11 Zijian Deng, Bicheng Li & Jun Zhuang: *Image Object Recognition by SVMs and Evidence Theory* (Information Engineering University)
- P2-12 Nazli Ikizler & Pinar Duygulu: *Person Search Made Easy* (Bilkent University)
- P2-13 Natasha Mohanty, Toni M. Rath, Audrey Lee & R. Manmatha: *Learning Shapes for Image Classification and Retrieval* (University of Massachusetts, Amherst)
- P2-14 Feiyang Yu, Horace H. S. Ip & Clement H. Leung: *A Heuristic Search for Relevant Images on the Web* (City University of Hong Kong/ Victoria University)
- P2-15 Daniel Heesch & Stefan Ruger: *Image Browsing: Semantic Analysis of NN^k Networks* (Imperial College London)
- P2-16 Nualsawat Hiransakolwong: *Automated Liver Detection in Ultrasound Images* (KMITL)
- P2-17 Nicolas Maillot & Monique Thonnat: *A Weakly Supervised Approach for Semantic Image Indexing and Retrieval* (INRIA Sophia Antipolis)
- P2-18 Mark J. Huiskes: *Aspect-Based Relevance Learning for Image Retrieval* (Centre for Mathematics and Computer Science)
- P2-19 Shingo Uchihashi & Takeo Kanade: *Content-Free Image Retrieval by Combinations of Keywords and User Feedbacks* (Carnegie Mellon University/Robotics Institute)
- P2-20 Szu-Hao Huang, Qu-Jiunn Wu & Shang-Hong Lai: *Improved AdaBoost-Based Image Retrieval with Relevance Feedback via Paired Feature Learning* (National Tsing Hua University)

1030 – 1130: MORNING TEA and POSTER DISPLAY SESSION 2

1130 – 1245: PAPER SESSION 5: Image/Video Annotation and Clustering

Chair: *Paul H. Lewis (University of Southampton)*

Paola Virga & Pinar Duygulu: *Systematic Evaluation of Machine Translation Methods for Image and Video Annotation* (Johns Hopkins University/ Bilkent University)

Xiangdong Zhou, Lian Chen, Jianye Ye, Qi Zhang & Baile Shi: *Automatic Image Semantic Annotation Based on Image-Keyword Document Model* (Fudan University/ University of North Carolina at Chapel Hill)

Chengcui Zhang & Xin Chen: *Region-Based Image Clustering and Retrieval using Multiple Instance Learning* (University of Alabama at Birmingham)

1245 – 1400: LUNCH

1400 – 1445: INVITED TALK 3

Chair: *Sbastien Gilles (LTU Technologies)*

Susanne Boll: *Image and Video Retrieval from a User-Centered Mobile Multimedia Perspective* (University of Oldenburg)

1445 – 1535: PAPER SESSION 6: Interactive Video Retrieval and Others

Chair: *Qing Li (City University of Hong Kong)*

John Adcock, Matthew Cooper, Andreas Girgensohn & Lynn Wilcox: *Interactive Video Search Using Multilevel Indexing* (FX Palo Alto Laboratory Inc)

Alexander G. Hauptmann & Wei-Hao Lin: *Assessing Effectiveness in Video Retrieval* (Carnegie Mellon University)

1535 – 1600: AFTERNOON TEA

1600 – 1715: PAPER SESSION 7: Image/Video Retrieval Applications

Chair: *John R. Smith (IBM T. J. Watson Research Center)*

Josef Sivic, Mark Everingham & Andrew Zisserman: *Person Spotting: Video Shot Retrieval for Face Sets* (University of Oxford)

Lluís Barcelo, Xavier Binefa & John R. Kender: *Robust Methods and Representations for Soccer Player Tracking and Collision Resolution* (Universitat Autònoma de Barcelona/ Columbia University)

Grant Scott, Matt Klaric & Chi-Ren Shyu: *Modeling Multi-object Spatial Relationships for Satellite Image Database Indexing and Retrieval* (University of Missouri-Columbia)

1730 – 2200: CONFERENCE BANQUET

(Venue: Singapore Night Safari)

Dinner and Night Safari Tour

TECHNICAL PROGRAMME – Friday

22 July, 2005

(Venue: LT34, SOC1, Level 3, NUS)

0900 – 0945: INVITED TALK 4

Chair: *Qibin Sun (Institute for Infocomm Research)*

John R. Smith: *Multimedia Research Challenges for Industry* (IBM T. J. Watson Research Center)

0945 – 1035: INDUSTRIAL SESSION 1

Chair: *Susanne Boll (University of Oldenburg)*

Keiichiro Hoashi, Masaru Sugano, Masaki Naito, Kazunori Matsumoto & Fumiaki Sugaya: *Video Story Segmentation and Its Application to Personal Video Recorders* (KDDI R&D Laboratories, Inc)

Hisashi Aoki: *High-Speed Dialog Detection for Automatic Segmentation of Recorded TV Program* (Toshiba Corporation)

1035 – 1050: MORNING TEA

1050 – 1135: KEYNOTE INDUSTRIAL TALK

Chair: *Tat-Seng Chua (National University of Singapore)*

Ramesh Jain: *Practical Applications of Multimedia Search* (University of California at Irvine)

1135 – 1250: INDUSTRIAL SESSION 2

Chair: *Clement Chia (Nanyang Technological University)*

Sheng-Mei Shen: *Intellectual Property Management & Protection and Digital Right Management in MPEG* (Panasonic Singapore Laboratories)

Qibin Sun: *Towards Media Semantics: An I2R Perspective* (Institute for Infocomm Research)

Sébastien Gilles: *Bringing Images and Video Technologies to the Market* (LTU Technologies)

1250 – 1300: CLOSING

Closing Remarks

Introduction to CIVR 2006

1300 – 1330: (..more) NETWORKING SESSION with LUNCH

CONFERENCE ORGANIZATION

Conference Co-chairs:

Tat-Seng Chua (National University of Singapore)

Weiyang Ma (Microsoft Research, Asia)

Program Co-chairs:

Wee Kheng Leow (National University of Singapore)

Michael S. Lew (LIACS Media Lab and Leiden University)

Practitioner Co-chairs:

Liang Tien Chia (Nanyang Technological University)

Sébastien Gilles (LTU Technologies)

Publications Chair:

Erwin M. Bakker (LIACS Media Lab and Leiden University)

Lekha Chaisorn (National University of Singapore)

Publicity Co-chairs:

Yi-Ping Hung (National Taiwan University)

Yelizaveta Marchenko (National University of Singapore)

Posters and Demos Chair:

Terence Sim (National University of Singapore)

Local Arrangements Chair:

Rui Shi (National University of Singapore)

Conference Secretariat:

Catharine Tan (National University of Singapore)