



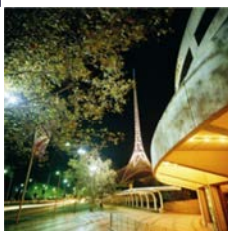
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IEEE International Conference on Multimedia & Expo

9th – 13th July, 2012
Melbourne, Australia



2012 IEEE International Conference on Multimedia and Expo

ICME 2012

9th – 13th July, 2012
Melbourne, Australia

SPONSORED BY

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Schedule At A Glance

Monday, 9 July

08:30 – 10:20	Workshops
09:00 – 10:20	Tutorials
10:20 – 10:50	Morning Tea
10:50 – 12:30	Tutorials & Workshops
12:30 – 13:30	Lunch *
13:30 – 15:10	Tutorials & Workshops
15:10 – 15:40	Afternoon Tea
15:40 – 18:00	Workshops
15:40 – 17:00	Tutorials
18:15 – 20:00	ICME 2012 Welcome Reception (see page 23)

Tuesday, 10 July

08:30 – 09:00	Opening remarks
09:00 – 10:00	Keynote Speech: Henry Fuchs
10:00 – 10:15	Elevator Pitch Session (best paper candidates)
10:15 – 10:40	Morning Tea
10:40 – 12:20	Technical Session
12:20 – 13:30	Lunch *
13:30 – 15:10	Technical Session
15:10 – 15:40	Afternoon Tea
15:40 – 16:40	Research Overview: Hong Tan
16:40 – 18:30	Technical Session

Wednesday, 11 July

09:00 – 10:00	Keynote Speech: Chang Wen Chen
10:00 – 10:05	Student Travel Grant Outcome Announcement
10:05 – 10:30	Morning Tea
10:30 – 12:30	Time Machine Plenary Session
12:30 – 13:40	Lunch *
13:40 – 15:00	Technical Session
15:00 – 15:30	Afternoon Tea
15:30 – 16:30	Research Overview: Kristen Grauman
16:30 – 18:00	Technical Session
19:00 – 22:00	ICME 2012 Conference Banquet Best Papers and Best Student Papers Outcome Announcement (see page 23)

Thursday, 12 July

09:00 – 10:00	Keynote Speech: Baining Guo
10:00 – 10:30	Morning Tea
10:30 – 11:50	Technical Session
11:50 – 13:10	Lunch *
13:10 – 14:30	Technical Session
14:30 – 15:00	Afternoon Tea
15:00 – 16:00	Research Overview: David Taubman

16:00 – 17:30 Technical Session

Monday, 13 July

08:30 – 10:20	Workshops
10:20 – 10:50	Morning Tea
10:50 – 12:30	Workshops
12:30 – 13:30	Lunch *
13:30 – 15:10	Workshops
15:10 – 15:40	Afternoon Tea
15:40 – 18:10	Workshops

* Lunch is not provided for by ICME 2012

Main Conference Schedule

10th July 2012			
Time/Day			
8:30-10:00	Opening Ceremony Keynote: Henry Fuchs		
10:00-10:15	Elevator Pitch Session (90-second highlight of each best paper candidates)		
10:15-10:40	Coffee Break		
10:40-12:20	OT1: Multimedia Content Analysis, understanding and Retrieval I Chairs: Zhen Wen Zicheng Liu Room: 103	OT2: Special session - online community Chairs: Lexing Xie - Extend to 12:40 to have a mini-panel Room: 101	OT3: Media Coding & Transcoding I Chairs: Gene CHEUNG, Ce Zhu Room: 104
12:20-13:30	Lunch		
13:30-15:10	OT5: Multimedia Content Analysis, understanding and Retrieval II Chairs: Xian-Sheng Hua Tuan Pham Room: 103	OT6: Image / Video Processing Chairs: Tokunbo Ogunfunmi Lixin Fan Room: 104	OT7: Media Streaming Chairs: Wenjun Zeng Room: 101
			OT8: Multimedia Security and Privacy Chairs: Patrizio Campisi Room: 102
15:10-15:40	Afternoon Tea		
15:40-16:40	Research Overview: Hong Tan		
16:40-18:30	Demo Session (Room: 102) Poster Session:PT1, Chair: Xin-Jing Wang, Room:103 PT2, Chair: Ruigang Yang, Room:103 PT3, Chair: Patrizio Campisi, Room:104 PT4, Chair: Gene Cheung, Room:104		

11th July 2012			
Time/Day			
9:00-10:00	Keynote: Chang Wen Chen		
10:00-10:05	Student Travel Grant Outcome Announcement		
10:05-10:30	Coffee Break		
10:30-12:30	Time Machine Plenary Session		
12:30-13:40	Lunch		
13:40-15:00	OW1: Multimedia Content Analysis, understanding and Retrieval III Chairs: Zicheng Liu Room: 103	OW2: Acoustic Signal Analysis & Processing Chairs: Julien Epps Room: 101	OW3: Media coding & transcoding II Chairs: Manzur Murshed Xiaoyan Sun Room: 104
			OW4: Special session - Perceptual Visual Signal Coding and Display Chairs: Henry Wu, Anil Fernando Room: 102
15:00-15:30	Afternoon Tea		
15:30-16:30	Research Overview: Kristen Grauman		
16:30-18:00	Poster Session: PW1, Chair: Roland Goecke, Room:103 PW2, Chair: Xavier Anguera, Room:103 PW3, Chair: Ce Zhu, Room:104 PW4, Chair: Chia-Wen Lin, Room:104		
19:00-22:00	ICME 2012 Conference Banquet in Melbourne Casino function hall Best Papers and Best Student Papers Outcome Announcement		

12th July 2012			
Time/Day			
9:00-10:00	Keynote: Baining Guo		
10:00-10:30	Morning Tea		
10:30-11:50	OH1: Multimedia Content Analysis, understanding and Retrieval IV Chairs: Leixing Xie, Mei-Ling Shyu Room: 103	OH2: Multimedia System and Architecture Chairs: Gary Chan, Jeroen Vendrigr Room: 101	OH3: Multimedia Applications Chairs: Jingdong Wang, Martha Larson Room: 104
11:50-13:10	Lunch		
13:10-14:30	OH5: Multimedia Content Analysis, understanding and Retrieval V Chairs: Tao Mei, Jingdong Wang Room: 103	OH6: Multimedia Signal Processing Chairs: Deepu Rajan Room: 104	OH7: 3D Media Chairs: Cha Zhang Room: 101
14:30-15:00	Afternoon Tea		
15:00-16:00	Research Overview: David Taubman		
16:00-17:30	Poster Session: PH1, Chair: Mei-Ling Shyu, Room:103 PH2, Chair: Jeroen Vendrigr, Room:103 PH3, Chair: Ruiqin Xiong, Room:104 PH4, Chair: JingjingFu, Room:104		

Workshops/Tutorials Schedule

9-Jul						
8:30-8:40	Opening	Opening	Opening	9:00	9:00	9:00
8:40-10:20 tutorials start from 9:00	WM1 MUST-EH Room 101	WM2 SMC Room 103	WM3 HotMM Room 104	Tutorial AMC Room 102	Tutorial APCDP Room 111	Tutorial NCMCD Room 112
10:20-10:50	Morning tea					
10:50-12:30	WM4 MUST-EH Room 101	WM5 SMC Room 103	WM6 HotMM Room 104	Tutorial AMC Room 102	Tutorial APCDP Room 111	Tutorial NCMCD Room 112
12:30-13:30	lunch					
13:30-15:10	Opening WM7 3DCIA Room 101	WM8 SMC Room 103	Opening WM9 TEMPEKU Room 104	Tutorial MTPPF Room 102	Tutorial HAA Room 111	Tutorial LMVDW Room 112
15:10-15:40	Afternoon tea					
15:40-17:20 tutorials finish at 17:00	WM10 3DCIA Room 101	WM11 SMC Room 103	WM12 TEMPEKU Room 104	Tutorial MTPPF Room 102	Tutorial HAA Room 111	Tutorial LMVDW Room 112
17:20-17:50	best paper discussion					
13-Jul						
8:30-8:40	Opening	Opening	Opening	Opening	Opening	Opening
8:40-10:20	WF1 EMSA Room 103	WF2 Hot3D Room 101	WF3 CLCAT Room 102	WF4 A-LSMM Room 111	WF5 HFC3D Room 104	WF6 AAMS-PS Room 112
10:20-10:50	Morning tea					
10:50-12:30	WF7 EMSA Room 103	WF8 Hot3D Room 101	WF9 CLCAT Room 102	WF10 A-LSMM Room 111	WF11 HFC3D Room 104	WF12 AAMS- PSRoom 112
12:30-13:30	lunch					
13:30-15:10	WF13 EMSA Room 103	Opening WF14 AIME Room 101	WF15 CLCAT 102	WF16	WF17 HFC3D Room 104	WF18 AAMS-PS Room 112
15:10-15:40	Afternoon tea					
15:40-17:00	WF19 EMSA Room 103	WF20 AIME Room 101	WF21 Design Thinking Part I Room 102	WF22	WF23	WF24
17:00-17:10	break					
17:10-18:10	WF25 EMSA Room 103	WF26:	WF27 Design Thinking Part II Room 102	WF28	WF29	WF30

Registration on-site

Registration

Registration is located in the foyer area in front of meeting rooms: 101-104.

Registration hours are as follows:

Monday, 9 July 2012	8:00 --18:00
Tuesday, 10 July 2012	8:00 --17:30
Wednesday, 11 July 2012	8:30 --17:30
Thursday, 12 July 2012	8:30 --17:30
Friday, 13 July 2012	8:30 --16:30

General Information

Internet Access

Wifi will be free available for all attendees. In order to gain access, please contact the registration desk

Notice for Oral Presentation Speakers

For oral presentations, speakers need to give session chairs their electronic presentation slides (USB or CD) before the technical session

Morning & Afternoon Tea breaks

All tea breaks will be served in the foyer area of the front of meeting rooms 102, 103 and 104.

Language

The language of the full paper and the presentation is English

Electricity

The electricity voltage in Australia is 220-240 volts, AC 50 Hz with 3-pin power outlets. If your equipment requires different voltage, you will need an electrical transformer.

How to get Melbourne Convention and Exhibition Centre

The Melbourne Convention and Exhibition Center is located on the banks of the Yarra River, only a short walk from Melbourne's central business district, and a 20-minute drive to Melbourne Airport connects MCEC to the rest of Australia and the world.

Arriving by Taxi

For the Convention Centre ask driver to drop off at Convention Centre Place, next to the Hilton South Wharf Hotel.

Arriving by Tram

Tram numbers 96, 112 and 109 travel down Spencer/Clarendon streets and stop opposite the Clarendon Street entrance of the MCEC.

Tram numbers 48 and 70 stop at the end of Flinders Street. Walk towards the Yarra River, across the new pedestrian bridge.

Arriving by Train

Take the train to Southern Cross Station. Tram numbers 96, 109 and 112 travel past Southern Cross Station down Spencer/Clarendon Streets and stop opposite the MCEC.

Arriving by Bus

The SkyBus transports visitors direct from Melbourne Airport to Southern Cross Station.

MCEC is a 10-minute walk from the station or catch tram 96 which stops opposite the Clarendon Street entrance of MCEC. Bus route 238 operates to and from Southern Cross Station to Convention Centre Place between the hours of 10am - 3pm, Monday to Friday. The coach pick-u/drop-off point is coach bay 1, Convention Centre Place (closest to DFO South Wharf). For timetable information, visit <http://www.wilsonparking.com.au/go/wilson-car-parks/vic/melbourne-exhibition-centre>

Parking

Wilson Parking offers affordable and secure parking at **Melbourne Exhibition Centre**. More detail, please access: <http://www.wilsonparking.com.au/go/wilson-car-parks/vic/melbourne-exhibition-centre>

**Please check the conference
web site for the most current information:
<http://www.icme2012.org>**

General Chairs Message



On behalf of the Organizing Committee, it is our great pleasure to welcome you to Melbourne, Australia, and the IEEE International Conference on Multimedia and Expo (ICME), July 9-13, 2012. ICME is sponsored by the IEEE Signal Processing Society, Circuits and Systems Society, Computer Society, and Communications Society. ICME is the premier forum for presentation in multimedia systems research, drawing recent, eminent contributions from academic and industrial institutions alike.

ICME 2012 is the thirteen in the series of ICME conferences that has been held annually since 2000, in various cities throughout the world. The success of this conference would not have been possible without the generous help of sponsors. Paper prizes and Student Travel Grants are sponsored by the National Information and Communications Technology Australia (NICTA), Microsoft Research, IBM Research, Canon Information Systems Research Australia (CiSRA), and Advanced Analytics Institute (AAI) at the University of Technology, Sydney (UTS).

ICME 2012 features a new plenary session – Time Machine! The session consists of a series of expert presentations that re-introduce ideas published "before their time" and, as a result, their impact has not yet been fully realized. ICME 2012 also has outstanding lectures including keynote lectures and research overviews:

Keynote Speakers

"Toward Transparent Tele-presence Systems"

Prof. Henry Fuchs, University of North Carolina at Chapel Hill, USA

"Mobile Multimedia Meet Cloud: Challenges and Future Directions"

Prof. Chang Wen Chen, State University of New York at Buffalo, USA

"The Future of Natural User Interface"

Dr. Baining Guo, Microsoft Research Asia, China

Research Overview Speakers

"Focusing Human Attention on the "Right" Visual Data"

Assistant Prof. Kristen Grauman, University of Texas at Austin, USA

"Haptics and its Application in Multimodal User Interfaces"

Prof. Hong Z. Tan, Microsoft Research Asia, China & Purdue University, USA

"Scalable Video Compression"

Prof. David Taubman, the University of New South Wales, Australia

ICME 2012 will offer several paper prizes, including Best Paper Award, Best Student Paper Award, and Best Demo Award.

We would like to express our sincere gratitude to Prof. Jianfei Cai (Nanyang Technological University, Singapore) for his invaluable service as Technical Program Coordination. We would also like to extend our appreciation to the Program Chairs (Jianfei Cai, Nanyang Technological University, Singapore; Alan Hanjalic, Delft University of Technology, The Netherlands; Enrico Magli, Politecnico di Torino Italy; Mark Pickering, The University of New South Wales, Australia; Gerald Friedland, International Computer Science Institute, USA; and Xian-Sheng Hua, Microsoft, USA). We would also like to thank the members of the program committee and reviewers whose invaluable effort and dedication led to the high-quality technical program and great success of ICME 2012.

Special thanks also go to the Local Arrangement and Finance Chairs, Prof. Henry Wu and Dr. Qiang Wu, for their tremendous support; Workshop Chairs, Dr. Jorge Caviedes and Dr. Tao Mei, for their outstanding effort in organizing the workshops; Plenary Chairs, Dr. Zhengyou Zhang and Dr. John Apostolopoulos, for forming an outstanding keynote and research overview lecture program; Innovation and Demo Chairs, Dr. Martha Larson and Dr. Mercan Topkara, for their great effort in establishing the new plenary session – Time Machine, Tutorial Chairs, Dr. Yen Kuang Chen and Prof. Shuicheng Yan, Special Session Chairs, Prof. Pascal Frossard and Dr. Zhen Wen, Award Chairs Prof. Manzur Murshed and Dr. Julien Epps, as well as all others who contributed to promotion, local arrangement and registration.

We would like to thank the ICME Steering Committee, especially the former and current ICME Steering Committee Chairs, Profs. Wenjin Zeng and Chang Wen Chen, for their support and guidance. We also like to thank the support of the IEEE Transactions on Multimedia Steering Committee and Editorial Board.

We would finally like to express our sincere appreciation to all of the authors and attendees for their contributions to ICME 2012. We are certain that you will value your participation in the conference and workshops, and hope you enjoy your stay in Melbourne.

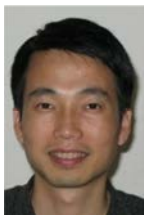
General Chairs

Associate Professor Jian Zhang, University of Technology, Sydney, Australia

Professor Dan Schonfeld, University of Illinois at Chicago, USA

Professor David Dagan Feng, University of Sydney, Australia

Technical Program Chairs Message



On behalf of the ICME 2012 Technical Program Committee, we warmly welcome you to Melbourne, Australia. ICME has been a flagship international conference for the presentation of novel and fundamental research advances in the field of Multimedia since 2000. It is sponsored by four IEEE societies (IEEE Signal Processing Society, IEEE Communication Society, IEEE Circuit and System Society and IEEE Computer Society), and ICME 2012 is the 13th event.

During the main conference (Jul. 10-12, 2012), the ICME 2012 daily technical program will start with a keynote talk delivered by a world class scientist. At the end of the keynote, a number of papers which are best paper award candidates will be highlighted. Four parallel oral sessions will be presented in the morning, and four additional parallel oral sessions will be presented in the early afternoon. Then, a research overview plenary session will run right after the afternoon tea break. We have designed the program in such a way that ICME audience will not miss the keynotes, overview talks and the plenary session, and can always find a high quality talk of interest at the parallel oral sessions. In addition, a 1.5~2 hour session is held in each afternoon with poster presentations and demos. Each oral paper is also provided with an additional poster presentation slot so that authors can have ample opportunity to interact with audience.

ICME 2012 will give FIVE awards including the best paper award, the best paper runner-up award, the best student paper award, the best student paper runner up award and the best demo award. The awards will be determined by the award selection committee based on the technical merits of the papers and the on-site presentations.

All the awards will be announced on Wed at the conference banquet. ICME 2012 will also hold two workshop days on Jul. 9 and Jul. 13, 2012, together with some high-quality tutorials offered to the registered attendees.

This year, we are pleased to report a strong technical program with exceptional quality. ICME 2012 Main Program has received 609 submissions. Lead by 6 Program Chairs and 18 Track Chairs, we have conducted the paper review in a double-blind manner with several aspects aimed to achieve a very rigorous review process, including author rebuttal, review discussion, meta-review and within-track discussions and cross-track discussions. Almost all papers have received 3 independent reviews, with 78% of the paper receiving 4 or more reviews. These reviews served as basis to select the 184 papers accepted into the main conference, a 30% overall acceptance rate. Out of the 184 accepted papers, top review scores papers are selected for oral presentation. In particular, the oral paper sessions consist of 79 accepted papers and 9 special session papers, corresponding to a 13% (14.4% if including special session papers) acceptance rate. A selected set of high quality ICME 2012 papers will also be invited to submit an extended version of the paper to be reviewed for acceptance into a special issue of IEEE Trans. on Multimedia.

In addition, ICME 2012 has 12 associated workshops, which have received a total of 174 submissions with 114 accepted papers, a 65% overall acceptance rate. ICME 2012 also has a separate demo program, which has accepted 8 demo proposals.

The technical program of ICME 2012 would not have been possible without the dedicated effort of volunteers of the entire ICME 2012 technical program committee and the organization committee. We are most grateful to the authors who have submitted their research work to ICME 2012, the track co-chairs, the technical program committee members who have contributed significantly to the peer review process. In particular, the ICME 2012 Program Chairs are most grateful to the 18 track co-chairs: Marcel Worring, Shuicheng Yan, Xavier Anguera, Jingdong Wang, Qi Tian, Michelle Zhou, Irene Cheng, Cha Zhang, Fernando Pereira, Dave Bull, Patrick Ndjiki-Nya, Nicu Sebe, Feng Wu, Ivan Bajic, Andreas Uhl, Patrizio Campisi, Andrew Perkis, Weisi Lin, for their hard working, cooperation and very professional way of organizing individual track reviews.

We would like to express our thanks to the ICME Steering Committee, especially to the current committee chair, Chang Wen Chen (SUNY Buffalo), as well as the past chair, Wenjun Zeng (University of Missouri), for their supports, guidance and advice. We also like to thank the support from the T-MM Steering Committee and Editorial Board. Last but not least, we would like to express our greatest

appreciate for the initiatives, support and supervision from ICME 2012 General Chairs, Jian Zhang, Dan Schonfeld, and David Dagan Feng.

Hope to see you all in Melbourne!

Jianfei Cai, Nanyang Technological University, Singapore

Alan Hanjalic, Delft University of Technology, The Netherlands

Enrico Magli, Politecnico di Torino Italy

Mark Pickering, The University of New South Wales, Australia

Gerald Friedland, International Computer Science Institute, USA

Xian-Sheng Hua, Microsoft, USA

Organizing Committee

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Jian Zhang, University of Technology, Sydney, Australia, NICTA
(National ICT Australia)

Dan Schonfeld, University of Illinois, USA

David Dagan Feng, The University of Sydney, Australia

Technical Program Coordinator

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Program Chairs

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Alan Hanjalic, Delft University of Technology, The Netherlands

Enrico Magli, Politecnico di Torino Italy

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Exhibition & Industry Connection Chair

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Julien Epps, The University of New South Wales, Australia

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Chair

Chang Wen Chen, State University of New York at Buffalo, USA

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Yong Rui, Microsoft, China

Communications Society

Khaled El-Maleh, Qualcomm, USA

Jin Li, Microsoft Research, USA

Computer Society

Ashfaq Khokhar, University of Illinois at Chicago, USA

Mei-Ling Shyu, University of Miami, USA

Signal Processing Society

Dinei A. Florencio, Microsoft Research, USA

Yap-Peng Tan, Nanyang Technological University, Singapore

Non-voting Members

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Haohong Wang, Cisco, USA (ComSoc MMTC Chair)

Shu-Ching Chen, Florida International University, USA (CS TCMC Chair)

Oscar Au, Hong Kong University of Science and Technology, Hong Kong (SPS MMSP TC Chair)

Mihaela van der Schaar, University of California at Los Angeles, USA (TMM EiC)

Irene Cheng, University of Alberta, Canada (ICME2011 General Chair)

Jian Zhang, University of Technology, Sydney, Australia (ICME2012 General Chair)

Administration

Lisa Schwarzbek, IEEE Signal Processing Society

Track Chairs

Track 1: Multimedia Content Analysis, Retrieval and Database

Track Chairs:

Marcel Worring, University of Amsterdam, Netherlands
Shuicheng Yan, National University of Singapore, Singapore
Xavier Anguera Telefonica, Spain
Jingdong Wang, Microsoft Research Asia, China

Track 2: Multimedia Applications, Interface and Interactions

Track Chairs:

Qi Tian, University of Texas at San Antonio, USA
Michelle Zhou, IBM Research, USA

Track 3: Multimedia Creation and Synthesis and 3D Media

Track Chairs:

Irene Cheng, University of Alberta, Canada
Cha Zhang, Microsoft Research Asia, China

Track 4: Multimedia Coding, transcoding and standards

Track Chairs:

Fernando Pereira, Instituto Superior Técnico, Portugal
Dave Bull, Univ of Bristol, UK

Track 5: Multimedia signal processing, system and architecture

Track Chairs:

Patrick Ndjiki-Nya, Heinrich Hertz Institute, Germany
Nicu Sebe, University of Trento, Italy

Track 6: Multimedia Networking and Communications

Track Chairs:

Feng Wu, Microsoft Research Asia, China
Ivan Bajic, Simon Fraser University, Canada

Track 7: Multimedia Security and Privacy

Track Chairs:

Andreas Uhl, University of Salzburg, Austria
Patrizio Campisi, University of Roma TRE, Italy

Track 8: Multimedia quality assessment and quality experience

Track Chairs:

Andrew Perkis, Norwegian University of Science and Technology, Norway
Weisi Lin, Nanyang Technological University, Singapore

Social Events

ICME 2012 Welcome Reception

Place: Foyer area of meeting rooms 103. 104 and 105

Date: Monday, 9 July 2012

Time: 18:15 – 20:00

ICME 2012 Conference Banquet Dinner

Place: 8 Whiteman Street Southbank VIC 3006, Australia

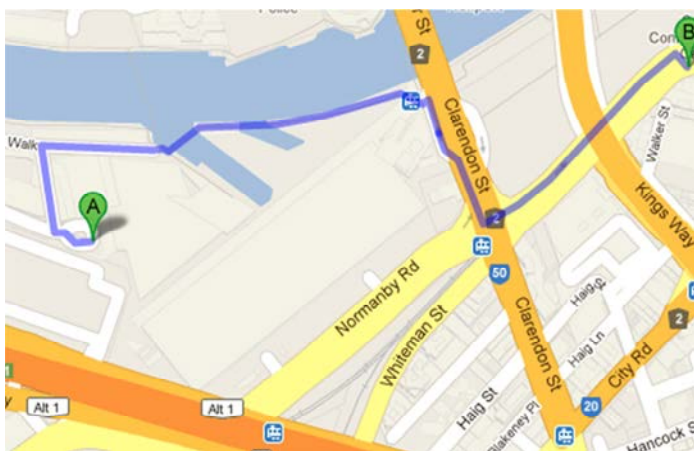
Date: Wednesday, 11 July 2012

Time: 9:00 – 22:00

How to get there:

You can reach the banquet dinner venue by walking across the Whiteman Street from the Melbourne Exhibition and Convention Centre. The function room is located at level 1 – River Room, Crown Towers (8 Whiteman Street Southbank VIC 3006, Australia Tel: 03 9292 6688)

Directions by walking to the Conference Banquet Dinner



A. Conference Venue & Welcome Reception: Melbourne Convention Centre

B. Conference Banquet

Technical Committee Meetings

10 July 2012

1. IEEE Circuits and Systems Society: Multimedia Systems and Applications (C&S MSA TC)
Time: 12:10 – 13:20
Room: 111
2. IEEE Communication Society: Multimedia Communications (ComSoc MM TC)
Time: 12:10 – 13:20
Room: 112
3. ICME Steering Committee (ICME SC)
Time: 18:00 – 19:30
Room: 112

11 July 2012

1. IEEE Signal Processing Society: Multimedia Signal Processing (MMSP TC)
Time: 12:30 – 13:40
Room: 111
2. IEEE Computer Society: Technical Committee on Multimedia Computing (CS TCMC)
Time: 11:50 – 13:10
Room: 112
3. Best paper award selection meeting
Time: 16.30 – 18.00
Room: 112

KEYNOTE TALKS

Keynote Speaker

Henry Fuchs



Federico Gil Distinguished Professor of Computer Science

Adjunct Professor in Department of Biomedical Engineering

University of North Carolina at Chapel Hill, USA

Email: fuchs@cs.unc.edu

Web: <http://www.cs.unc.edu/~fuchs/>

Toward Transparent Telepresence Systems

Time: 8:50-10:00, 10th July 2012

Room: 105

Abstract:

Dreams of telepresence are fed by special effects in movies, on stage, and even in mainstream news programs. These illusions may satisfy most passive viewers, but do not work for the actual distant participants. Even today's best "Telepresence" systems have difficulty supporting such simple capabilities as eye contact and gaze awareness among these multiple distant participants. This talk will review some component technologies needed to achieve natural--some would say "transparent"--telepresence (3D acquisition, tracking, rendering, 3D display), will present some recent progress, and will outline several promising future directions. Specifically, recent progress in 3D depth cameras, and in multi-viewer autostereo displays may make possible dramatically improved telepresence systems within the next few years. Such progress will allow development of a new generation of capabilities, such as the distant participants mixing naturally and arbitrarily in the shared space, which today are beyond consideration of even the best "Telepresence" systems.

About the speaker:

Henry Fuchs has been active in computer graphics since the 1970s, with rendering algorithms (BSP Trees), hardware (Pixel-Planes), virtual environments, tele-immersion systems and medical applications. He is a member of the (US) National Academy of Engineering, the American Academy of Arts and Sciences, recipient of the 1992 ACM-SIGGRAPH Achievement Award, the 1992 Academic Award of the National Computer Graphics Association, and the 1997 Satava Award of the Medicine Meets Virtual Reality Conferences. With Nadia Thalmann and Markus Gross, he co-directs the NTU Singapore - ETH Zurich - UNC Chapel Hill BeingThere Telepresence Research Centre.

Keynote Speaker

Chang Wen Chen

Professor

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Mobile Multimedia Meet Cloud: Challenges and Future Directions

Time: 9:00-10:00, 11th July 2012

Room: 105

Abstract:

Smart phones and tablets are becoming the most desired platforms for ubiquitous multimedia services. When this contemporary trend of mobile media meets the increasing availability of public Clouds, a new technical paradigm, Cloud Mobile Media, is now emerging. This new paradigm presents numerous challenges for researchers to develop next generation cloud-driven media services for omnipresent mobile users. This talk shall identify several major challenges in cloud-centric mobile media in properly discovering and seamlessly transporting the user desired media contents in their most appropriate form between the ubiquitous cloud infrastructures and the heterogeneous mobile devices. In particular, key factors that impact the cloud mobile media services, including service latency, user experience, mobility management, energy efficiency, and content security, will be examined. This talk shall also outline some future research directions to further advance this emerging cloud mobile media by overcoming technical barriers resulting from the mismatch between resource abundant cloud infrastructures and severely resource limited mobile devices.

About the speaker:

Dr. Chen has been working extensively in the areas of multimedia, digital image and video, distributed systems, and sensor network for more than 20 years. He has published over 200 research papers at highly-ranked international journals and leading international conferences. He was elected an IEEE Fellow for his contributions in digital image and video processing, analysis, and communications and an SPIE Fellow for his contributions in electronic imaging and visual communications.

Keynote Speaker

Baining Guo

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The Future of Natural User Interface

Time: 9:00-10:00, 12th July 2012

Room: 105

Abstract:

Natural user interaction devices such as Microsoft Kinect create tremendous excitements and opportunities for researchers and technologists in multimedia computing. Despite commercial success of these devices, we are still the early stage of an evolution towards natural and seamless interaction between computer and human. To build a truly natural user interface, we need multi-disciplinary collaboration and innovation from researchers in computer vision, computer graphics, CHI, signal processing, and related areas. In this talk, I will use recent technological advances with Microsoft Kinect to illustrate core technologies employed by today's natural user interfaces. I will also try to identify a few emerging research themes in this new and exciting area.

About the Speaker:

Dr. Baining Guo is a Deputy Managing Director at Microsoft Research Asia, where he also leads the graphics lab. Prior to joining Microsoft Research in 1999, he was a senior staff researcher with the Microcomputer Research Labs of Intel Corporation in Santa Clara, California. Dr. Guo graduated from Beijing University with B.S. in mathematics. He went to Cornell University for his graduate study from 1986 to 1991 and obtained M.S. in Computer Science and Ph.D. in Applied Mathematics. Dr. Guo is an IEEE fellow and an ACM fellow. Dr. Guo's research interests include computer graphics, visualization, natural user interface, and statistical learning. He is particularly interested in studying light transmission and reflection in complex, textured materials, with applications to texture and reflectance modeling. He also worked on real-time rendering and geometry modeling. Dr. Guo was on the editorial boards of IEEE Transactions on Visualization and Computer Graphics (2006--2010) and Computer and Graphics (2007 -- 2011). He is currently an associate editor of IEEE Computer Graphics and Applications. He has served on the program committees of numerous conferences in graphics and visualization, including ACM Siggraph and IEEE Visualization. Dr. Guo holds over 40 US patents.

RESEARCH OVERVIEW TALKS

Research Overview

Hong Z. Tan

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Haptics and its Application in Multimodal User Interfaces

Time: 15:40-16:40, 10th July 2012

Room: 105

Abstract:

For a long time, the sense of touch has been regarded as an inferior sense as compared to vision or audition. However, the potential to receive information through touch is well illustrated by natural communication methods used by individuals with severe auditory and/or visual impairments. The last decade has witnessed renewed interests in transmitting information through touch for enhanced interaction experience. I will start this research overview talk with a brief introduction to the human somatosensory system. I will then present an overview of state-of-the-art haptic technologies. Finally, I will discuss two research programs, haptic cuing of visual attention and visuohaptic watermarking, to illustrate the application of haptics in multimodal user interfaces.

About the Speaker:

Hong Z. Tan is a professor of electrical and computer engineering with courtesy appointments in mechanical engineering and psychological sciences at Purdue University. She is currently working at Microsoft Research Asia while taking a research leave from Purdue University. Her research focuses on haptic human-machine interfaces and haptic perception. She is best known for her perception-based approach to solving engineering problems. She received her Bachelor's degree in Biomedical Engineering from Shanghai Jiao Tong University, P.R. China. She earned her Master and Doctorate degrees, both in Electrical Engineering and Computer Science, from the Massachusetts Institute of Technology (MIT). She was a Research Scientist at the MIT Media Laboratory before joining the faculty at Purdue's School of Electrical and Computer Engineering in 1998. She has held a McDonnell Visiting Fellowship at Oxford

University, and a Visiting Associate Professorship in the Department of Computer Science at Stanford University.

Tan was a recipient of the US National Science Foundation's Early Faculty Development (CAREER) Award from 2000 to 2004. In addition to serving on numerous program committees, she was a co-organizer (with Blake Hannaford) of the International Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems from 2003 to 2005. She was the founding chair of the IEEE Technical Committee on Haptics, a home for the international interdisciplinary haptics research community, from 2006 to 2008. She has served as an associate editor of Presence: Teleoperators & Virtual Environments, ACM Transactions on Applied Perception and IEEE Transactions on Haptics.

Research Overview

Kristen Grauman

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Focusing Human Attention on the "Right" Visual Data

Time: 15:30-16:30, 11th July 2012

Room: 105

Abstract:

Widespread visual sensors and unprecedented connectivity have left us awash with visual data---from online photo collections, home videos, news footage, medical images, or surveillance feeds. Which images and videos among them warrant human attention? This talk focuses on two problem settings in which this question is critical: supervised learning of object categories, and unsupervised video summarization. In the first setting, the challenge is to sift through candidate training images and select those that, if labeled by a human, would be most informative to the recognition system. In the second, the challenge is to sift through a long-running video and select only the essential parts needed to summarize it for a human viewer. I will present our recent research addressing these problems, including novel algorithms for large-scale active learning and egocentric video synopses for wearable cameras. Both domains demonstrate the importance of "semi-automating" certain computer vision tasks, and suggest exciting new applications for large-scale visual analysis.

About the Speaker:

Kristen Grauman is the Clare Boothe Luce Assistant Professor in the Department of Computer Science at the University of Texas at Austin. Her research in computer vision and machine learning focuses on visual search and object recognition. Before joining UT-Austin in 2007, she received her Ph.D. in the EECS department at MIT, in the Computer Science and Artificial Intelligence Laboratory. She is an Alfred P. Sloan Research Fellow and Microsoft Research New Faculty Fellow, and a recipient of NSF CAREER and ONR Young Investigator awards. She and her collaborators were recognized with the CVPR Best Student Paper Award in 2008 for work on hashing algorithms for large-scale image retrieval and the Marr Best Paper Prize at ICCV in 2011 for work on modeling relative visual attributes.

Research Overview

David Taubman

Professor

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Scalable Video Compression

Time: 15:00-16:00, 12th July 2012

Room: 105

Abstract:

Scalable media compression algorithms are desirable because they allow the content to be compressed without prior knowledge of the set of bit-rates and/or resolutions at which it is to be distributed and decoded. Scalable image compression technologies are now well understood and highly competitive with non-scalable variants. In fact, applications that rely upon the scalability and interactive accessibility features of the highly scalable image compression standard JPEG2000 have been expanding in recent times and some of these applications intersect with the domain of video compression. Highly scalable video compression itself is fundamentally more challenging than scalable image compression, primarily because efficient video compressors rely upon the explicit estimation and communication of motion side information. Nevertheless, important advances in scalable video compression have been made over the past decade. One outcome of such developments is the SVC extension of H.264/AVC, where multiple spatial and temporal resolution layers are compressed with their own motion fields, but with the aid of inter-layer prediction. Other approaches, replace prediction alone with motion compensated 3D wavelet transforms, with approximately orthogonal basis functions. From a theoretical perspective, such approaches are fundamentally superior to inter-layer prediction; moreover, they have the property that all information associated with lower resolutions is fully embedded inside the higher resolution information, which can have important advantages in interactive browsing applications. However, 3D wavelet transforms have their own drawbacks, primarily related to the representation and scaling of suitable motion fields.

This presentation will present an overview of the major approaches that have been taken to the problem of scalable video compression, including some of the more important theoretical concepts. Various applications for scalable video coding will be presented, including emerging applications. The talk will highlight what has been achieved,

as well as future directions for research and some alternate paradigms for exploiting redundancy that may compete with scalable video compression. Considering the importance of motion, the presentation will also provide some insights and recent results related to new approaches to the efficient and scalable representation of motion information.

About the Speaker:

David Taubman is with the School of Electrical Engineering and Telecommunications, at the University of New South Wales, where he heads the Telecommunications Research Group. Before joining UNSW at the end of 1998, he spent 4 years at Hewlett-Packard's research laboratories in Palo Alto, California. He received the B.S. and B.E. (Electrical) degrees in 1986 and 1988 from the University of Sydney, Australia, and the M.S. and Ph.D. degrees in 1992 and 1994 from the University of California at Berkeley. He has contributed extensively to the JPEG2000 standard for image compression and the JPIP standard for interactive image communication and continues to contribute to these technologies. He is author, with Michael Marcellin, of the book "JPEG2000: Image compression fundamentals, standards and practice" and author of the popular Kakadu software for JPEG2000 developers. He is recipient of two IEEE Best Paper awards: for the 1996 paper, "A Common Framework for Rate and Distortion Based Scaling of Highly Scalable Compressed Video;" and for the 2000 paper, "High Performance Scalable Image Compression with EBCOT". His research interests include scalable image and video compression, robust communication of scalable media over unreliable channels, interactive multimedia communication, perceptual modeling of video and statistical inverse problems in imaging.

**TIME MACHINE
EXPERT TALKS**

Expert Talk for Time Machine Session

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Dynamic Time Warping New Youth

Time: 10:30-12:30 Room: 105

Before the use of Hidden Markov Models (HMM) became ubiquitous in speech-related applications, pattern matching algorithms like the well known Dynamic Time Warping (DTW) algorithm [1] were extensively used for applications such as spoken keyword recognition [2]. At the time, the main drawbacks of this technology were its computational cost (given the machinery available at the time) and the lack of generalization when matching acoustic sequences from different speakers or different acoustic contexts. The availability of labeled datasets used for training pushed pattern matching techniques aside in favor of HMMs. Still, HMMs have several well known weaknesses, such as overgeneralization given the training data, lack of robustness to changing noise conditions and the need to have large corpora of well-labeled training data, limiting their suitability for some speech applications. For this reason, recently some research groups started to look again at DTW as a plausible alternative, and worked on smoothing those issues that made it unsuitable in the past. On the one hand, new acoustic features are being researched [3] to make the matching as independent as possible to the speaker, while keeping the content. On the other hand, although computing power is much improved from the 70's, DTW several enhancements have been proposed [4,5] in order to allow for more challenging tasks than in the past. Some of the tasks where pattern-matching (and in particular DTW) approaches are currently applied are: automatic discovery of repeated patterns in speech, query-by-example voice search, pattern-based speech recognition and low-resource languages analysis.

References:

- [1] H. Sakoe and S. Chiba, "Dynamic programming algorithm optimization for spoken word recognition," IEEE Transactions on Acoustics, Speech and Signal Processing, vol. 26, pp. 43–49, 1978.
- [2] Alan L. Higgins and Robert E. Wohlford, "Keyword recognition using template concatenation," in In Proc. ICASSP 1985, 1985.
- [3] G. Aradilla, "Using Posterior-Based Features in Template Matching for Speech Recognition," in ICSLP, 2006.
- [4] X. Anguera, R. Macrae, and N. Oliver, "Partial Sequence Matching using an Unbounded Dynamic Time Warping Algorithm," ICASSP, 2010.
- [5] A. Jansen and B. V. Durme, "Efficient Spoken Term Discovery Using Randomized Algorithms," in ASRU, 2011.

Expert Talk for Time Machine Session

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Designing Calm Technology “...as Refreshing as Taking a Walk in the Woods”

Time: 10:30-12:30

Room: 105

In 1995, Mark Weiser and John Seeley Brown said that computers would enter society in 3 stages. The Mainframe Era was followed by the Personal Computer Era. They predicted that the internet and distributed computing would lead to an era of Ubiquitous Computing. Some say that it has, but what we now call UC is not what Weiser and Brown described. It is true that each person now uses many computers, instead of the other way around, but they did not just define UC by the human: computer ratio.

“The most potentially interesting, challenging and profound change implied by the ubiquitous computing era is a focus on calm.”

Calm Technology is based on the two ways that humans process information. Trying to focus on more than one thing at once is stressful, but humans can take in much more information if it is presented peripherally; in a way that allows the individual to judge whether or not to give it more attention. Basic physiology and neuroanatomy show that we naturally examine things closely while at the same time using other senses to keep track of subtle changes in our environment, warning us when the peripheral becomes important. What’s more, the process of plucking things from the periphery, examining them and then deciding how to resort them is a comforting activity. It makes us feel at home and in control.

Ubiquitous Computing is everywhere now (if you’ll pardon the pun) but Calm Technology has been all but abandoned because it is harder to design and implement than traditional multi-media interaction. So, instead of deliberate calm, we have constant text message alerts, ring tones and email pop-ups demanding the immediate attention of everyone within earshot. Imagine instead that your cell phone would subtly let you know who is trying to reach you without pulling your attention away from the task at hand. It could be as gentle as familiar footsteps drawing close or the hint of a smile on your touchscreen.

Hardware and software are now more than good enough, and rich multimedia can be customised, stored, accessed and processed quickly and cheaply. It is time for Human Computer Interaction based on rich and textured interfaces; interaction that is less like a series of screaming emergencies fighting for our attention, and more like a walk in the woods.

It is time for Calm Technology.

References:

Weiser and Brown, "Designing Calm Technology", 1995, Powergrid Journal, 1,1. (Available from: <http://sandbox.xerox.com/hypertext/weiser/calmtech/calmtech.htm>)

Expert Talk for Time Machine Session

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Affective Multimedia Analysis: Introduction, Background and Perspectives

Time: 10:30-12:30

Room: 105

In 1995, Picard proposed ideas about how to use affective computing for multimedia selection [1]. She envisaged a content player which can sense user's emotional state and deliver the content that matches her emotional state. This also needs an emotional understanding of the content itself. In 2001, Hanjalic and Xu proposed a user oriented affective video content analysis which pioneered the track of research which aimed at understanding the affective content of videos using the content [2].

With the current rate of the expansion of user generated content. The classic, cognitive indexing methods are showing their limits. Affective indexing is showing a potential alternative which attracts multimedia researchers. Users are also expecting content recommendation and delivery systems that can better adapt to their taste and emotions. Although the user interaction and social information is bridging the existing gap between the users and machines, emotional understanding from the content and users will certainly improve users' experience.

Although, affective computing now has its own journal, IEEE Transactions on Affective Computing, and its biannual conference, Affective Computing and Intelligent Interactions (ACII) multimedia community does not have a strong presence in those publications. Multimedia related affective research is being published in different venues and lacks coherence and standardization. Unlike, emotion recognition studies which have large number of publicly available databases and challenges. There is a lack of standard benchmarks for video affective analysis. This is partly due to the usage of copyrighted material which prohibits publishing and sharing the datasets. The other reason behind this lack of consensus is that this track of research lacks its own forum which brings together the interested scholars or industrial key players. In this talk, I will present the origins of the idea of using affect in content delivery system, from Picard's technical report and follow

its development in the last decade to its current state of the art. The focus of the talk will be on content analysis for affective characterization and not on affect sensing. At the end, I will give recommendations on affective corpora development and present an example of public affective content corpus development, i.e., Violence scenes detection at Mediaeval benchmarking campaign.

References:

- [1] Picard, R. (1995). Affective computing. Technical Report 321, MIT Media Laboratory, MIT Media Laboratory: Perceptual Computing; 20 Ames St., Cambridge, MA 02139. Available online at : <http://affect.media.mit.edu/pdfs/95.picard.pdf>
- [2] Hanjalic, A.; Li-Qun Xu, "User-oriented affective video content analysis," Content-Based Access of Image and Video Libraries, 2001. (CBAIVL 2001). IEEE Workshop on , vol., no., pp.50-57, 2001.doi: 10.1109/IVL.2001.990856, available online at :<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=990856&isnumber=21352>

Expert Talk for Time Machine Session

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High Order Entropy Coding – From Conventional Video Coding to Distributed

Time: 10:30-12:30

Room: 105

High order entropy coding has been extensively studied for conventional/centralized image/video coding and is believed to be much more important for improving the coding efficiency than adapting transform and quantization to the input signal [1-4]. Yet it has not been explored to any significant extent for distributed video coding (DVC), a paradigm shifting approach that features “simple encoder and complex decoder” that is well suited to emerging applications such as wireless sensor network and distributed parallel processing.

DVC research in the past decade has shown significant performance gap from conventional video coding techniques despite many advantages of the DVC paradigm. This is mainly because DVC suffers from the extreme difficulty in estimating the side information (equivalent to the motion compensated prediction in conventional video coding). This major obstacle has led to confusion and misconception, which has discouraged researchers to look into the issue of exploiting high order spatial correlations in DVC - a task itself proving to be very challenging too in the DVC paradigm. Recent work in my group [5] provided some theoretical analysis of the performance of DVC in terms of side information estimation and has demonstrated that in practice it has comparable performance as traditional motion compensated prediction. This suggests that it is the right time now to move on to investigate how to efficiently explore the high order spatial correlations in DVC. In this talk, I will review the evolution of techniques that have been proposed for high order entropy coding in conventional video coding, with a focus on high order context based approaches, and discuss how previous ideas and experiences can be leveraged to speed-up the progress in designing highly efficient entropy coding in the context of DVC.

References:

1. J. M. Shapiro, “Embedded image coding using zerotrees of wavelet coefficients”, IEEE Trans. Signal Processing, vol. 41, no. 12, pp. 3445-3462, Dec. 1993

2. A. Said and W. A. Pearlman, "New, fast, and efficient image codec based on set partitioning in hierarchical trees", IEEE Trans. Circ. & Sys. Video Tech., vol. 6, no. 3, pp. 243-249, June 1996.
3. X. Wu, "High-Order Context Modeling and Embedded Conditional Entropy Coding of Wavelet Coefficients for Image Compression," the 31st Asilomar Conference on Signals, Systems & Computers, 1997.
4. D. Taubman and M. W. Marcelin, JPEG2000: Image Compression Fundamentals, Standards and Practice, Springer, 2002.
5. W. Liu, L. Dong and W. Zeng, "Motion Refinement Based Progressive Side-Information Estimation for Wyner-Ziv Video Coding," IEEE Trans. on Cir. and Sys. for Video Technology, vol. 20, no. 12, Dec. 2010.

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MAIN CONFERENCE PROGRAM

10th July 2012, Morning

Opening Ceremony

Keynote: Henry Fuchs, University of North Carolina at Chapel Hill, USA

Time: 8:30-10:00

Room: 105

Elevator Pitch Session (90-second highlight of each best paper candidates)

Time: 10:00-10:15

Coffee Break

Time: 10:15-10:40

OT1: Multimedia Content Analysis, understanding and Retrieval I

Chairs: Zhen Wen, IBM Research, USA
Zicheng Liu, MSRA, China

Time: 10:40-12:20

Room: 103

Paper ID: 292

A HIERARCHICAL MODEL FOR HUMAN INTERACTION RECOGNITION
Yu Kong and Yunde Jia

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT1

Paper ID: 329

SOCIAL IMAGE TAGGING BY MINING SPARSE TAG PATTERNS FROM
AUXILIARY DATA

Jie Lin, Junsong Yuan, Ling-Yu Duan, Siwei Luo, Wen Gao

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT1

Paper ID: 494

LEARNING GLOBAL AND RECONFIGURABLE PART-BASED MODELS
FOR OBJECT DETECTION

Xi Song, Tianfu Wu, Yi Xie, and Yunde Jia

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT1

Paper ID: 581

SPIKING AND BLOCKING EVENTS DETECTION AND ANALYSIS IN VOLLEYBALL VIDEOS

Chun-Chieh Hsu, Hua-Tsung Chen, Chien-Li Chou, Suh-Yin Lee

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT1

Paper ID: 655

RECOGNITION OF MULTIPLE-FOOD IMAGES BY DETECTING CANDIDATE REGIONS

Yuji Matsuda, Hajime Hoashi and Keiji Yanai

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT1

OT2: Special session - online community

Chairs: Lexing Xie, Australian National University, Australia

Time: 10:40-12:20 extend to 12:40 to have a mini-panel

Room: 101

Paper ID: 798

DISCOVERING SOCIAL PHOTO NAVIGATION PATTERNS

Luca Chiarandini, Michele Trevisiol, Alejandro Jaimes

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT2

Paper ID: 665

GROUP RECOMMENDATION USING EXTERNAL FOLLOWEE FOR
SOCIAL TV

Xiaoyan Wang, Lifeng Sun, ZhiWang and Da Meng

Track: Multimedia Applications, Interface and Interaction

Session ID: OT2

Paper ID: 459

MULTIMODAL LOCATION ESTIMATION OF CONSUMER MEDIA:
DEALING WITH SPARSE TRAINING DATA

Jaeyoung Choi, Gerald Friedland, Venkatesan Ekambaram, Kannan
Ramchandran

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT2

Paper ID: 257

EMPOWERING CROSS-DOMAIN INTERNET MEDIA WITH REAL-TIME
TOPIC LEARNING FROM SOCIAL STREAMS

Suman D. Roy, Tao Mei, Wenjun Zeng, Shipeng Li

Track: Multimedia Applications, Interface and Interaction

Session ID: OT2

Paper ID: 747

MEDIA LIFECYCLE AND CONTENT ANALYSIS IN SOCIAL MEDIA
COMMUNITIES

Lexing Xie, Hari Sundaram

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT2

OT3: Media Coding & Transcoding I

Chairs: Gene Cheung, National Institute of Informatics, Japan
Ce Zhu, Nanyang Technological University, Singapore

Time: 10:40-12:20

Room: 104

Paper ID: 587

A FAST AND PERFORMANCE-MAINTAINED TRANSCODING METHOD
BASED ON BACKGROUND MODELING FOR SURVEILLANCE VIDEO

Mingchao Geng, Xianguo Zhang, Yonghong Tian, Luhong Liang,
Tiejun Huang

Track: Multimedia Coding, Transcoding and Standards

Session ID: OT3

Paper ID: 700

A UNIFIED ESTIMATION-THEORETIC FRAMEWORK FOR ERROR-
RESILIENT SCALABLE VIDEO CODING

Jingning Han, Vinay Melkote, Kenneth Rose

Track: Multimedia Coding, Transcoding and Standards

Session ID: OT3

Paper ID: 365

SALIENCY-COGNIZANT ERROR CONCEALMENT IN LOSS-CORRUPTED
STREAMING VIDEO

Hadi Hadizadeh, Ivan V. Bajic, Gene Cheung

Track: Multimedia Networking and Communications

Session ID: OT3

Paper ID: 375

IMPACT OF REGION-OF-INTEREST VIDEO CODING ON PERCEIVED
QUALITY IN MOBILE VIDEO

Ivan Himawan, Wei Song, Dian Tjondronegoro

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OT3

Paper ID: 654

SOURCE DISTORTION TEMPORAL PROPAGATION MODEL FOR
MOTION COMPENSATED VIDEO CODING OPTIMIZATION

Tianwu Yang, Ce Zhu, Xiaojia Fan, Qiang Peng

Track: Multimedia Coding, Transcoding and Standards

Session ID: OT3

OT4: 3D Analysis & Scene Synthesis

Chairs: Ruigang Yang, University of Kentucky, USA

Philip A. Chou, Microsoft, USA

Time: 10:40-12:20

Room: 102

Paper ID: 621

MULTI-PERSPECTIVE PANORAMAS OF LONG SCENES

Siyuan Fang, Neill Campbell

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OT4

Paper ID: 366

MULTI-HYPOTHESIS PROJECTION-BASED SHIFT ESTIMATION FOR
SWEEPING PANORAMA RECONSTRUCTION

Tuan Q. Pham, Philip Cox

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OT4

Paper ID: 102

SCENE SEGMENTATION AND PEDESTRIAN CLASSIFICATION FROM 3-
D RANGE AND INTENSITY IMAGES

Xue Wei, Son Lam Phung, and Abdesselam Bouzerdoum

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OT4

Paper ID: 457

DEPTH-BASED DISOCCLUSION FILLING FOR VIRTUAL VIEW
SYNTHESIS

Ilkoo Ahn and Changick Kim

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OT4

Paper ID: 702

VIRTUAL VIEW RECONSTRUCTION USING TEMPORAL INFORMATION
Shujie Liu, Philip A. Chou, Cha Zhang, Zhengyou Zhang, Chang Wen
Chen

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OT4

Lunch

Time: 12:20-13:30

10th July 2012, Afternoon

OT5: Multimedia Content Analysis, understanding and Retrieval II

Chairs: Xian-Sheng Hua, Microsoft, USA

Tuan Pham, Canon Information Systems Research Australia
(CiSRA), Australia

Time: 13:30-15:10

Room: 103

Paper ID: 737

REGRESSION BASED POSE ESTIMATION WITH AUTOMATIC
OCCLUSION DETECTION AND RECTIFICATION

Ibrahim Radwan, Abhinav Dhall, Jyoti Joshi, Roland Goecke

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT5

Paper ID: 356

2D FACE ALIGNMENT AND POSE ESTIMATION BASED ON 3D FACIAL
MODELS

Shen-Chi Chen, Chia-Hsiang Wu, Shih-Yao Lin, Yi-Ping Hung

Track: Multimedia Applications, Interface and Interaction

Session ID: OT5

Paper ID: 372

EFFICIENT TAG MINING VIA MIXTURE MODELING FOR REAL-TIME
SEARCH-BASED IMAGE ANNOTATION

Lican Dai, Xin-Jing Wang, Lei Zhang, Nenghai Yu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT5

Paper ID: 211

A LARGE SCALE EXPERIMENT FOR MOOD-BASED CLASSIFICATION
OF TV PROGRAMMES

Jana Eggink, Denise Bland

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT5

Paper ID: 266

PER-EXEMPLAR FUSION LEARNING FOR VIDEO RETRIEVAL AND
RECOUNTING

Ilseo Kim, Sangmin Oh, A. G. Amitha Perera, Chin-Hui Lee

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT5

OT6: Image / Video Processing

Chairs: Tokunbo Ogunfunmi, Santa Clara University, USA
Lixin Fan, Nokia Research Center, Finland

Time: 13:30-15:10

Room: 104

Paper ID: 5

JOINT EXAMPLE-BASED DEPTH MAP SUPER-RESOLUTION

Yanjie Li, Tianfan Xue, Lifeng Sun, Jianzhuang Liu

Track: Multimedia Signal Processing, System and Architect

Session ID: OT6

Paper ID: 371

SPATIOTEMPORAL SALIENCY DETECTION VIA SPARSE
REPRESENTATION

Zhixiang Ren, Shenghua Gao, Deepu Rajan, Liang-Tien Chia, Yun
Huang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OT6

Paper ID: 434

CONTEXT-AWARE SINGLE IMAGE RAIN REMOVAL

De-An Huang, Li-Wei Kang, Min-Chun Yang, Chia-Wen Lin, Yu-
Chiang Frank Wang

Track: Multimedia Signal Processing, System and Architect

Session ID: OT6

Paper ID: 294

FROM 2D EXTRAPOLATION TO 1D INTERPOLATION: CONTENT
ADAPTIVE IMAGE BIT-DEPTH EXPANSION

Pengfei Wan, Oscar C. Au, Ketan Tang, Yuanfang Guo, Lu Fang

Track: Multimedia Signal Processing, System and Architect

Session ID: OT6

Paper ID: 503

VIEW-INVARIANT FALL DETECTION SYSTEM BASED ON SILHOUETTE
AREA AND ORIENTATION

Behzad Mirmahboub, Shadrokh Samavi, Nader Karimi, Shahram
Shirani

Track: Multimedia Applications, Interface and Interaction

Session ID: OT6

OT7: Media Streaming

Chairs: Wenjun Zeng, University of Missouri, USA

Time: 13:30-15:10

Room: 101

Paper ID: 235

TRAFFIC REDUCTION FOR MULTIPLE USERS IN MULTI-VIEW VIDEO STREAMING

Takuya Fujihashi, Ziyuan Pan, Takashi Watanabe

Track: Multimedia Networking and Communications

Session ID: OT7

Paper ID: 699

QOS-DRIVEN AND FAIR DOWNLINK SCHEDULING FOR VIDEO STREAMING OVER LTE NETWORKS WITH DEADLINE AND HARD HAND-OFF

Qian Liu, Zixuan Zou, Chang Wen Chen

Track: Multimedia Networking and Communications

Session ID: OT7

Paper ID: 526

BAND CODES: CONTROLLED COMPLEXITY NETWORK CODING\\FOR PEER-TO-PEER VIDEO STREAMING

Attilio Fiandrotti, Valerio Bioglio, Enrico Magli, Marco Grangetto, Rossano Gaeta

Track: Multimedia Networking and Communications

Session ID: OT7

Paper ID: 546

RANDOM NETWORK CODING FOR MULTIMEDIA DELIVERY OVER LTE-ADVANCED

Dejan Vukobratovic, Chadi Khirallah, Vladimir Stankovic, John Thompson

Track: Multimedia Networking and Communications

Session ID: OT7

Paper ID: 551

A CROSS-LAYER VIDEO TRANSMISSION SCHEME WITH GUARANTEED END-TO-END QOS OVER MIMO OFDM SYSTEMS

Yahui Hu, Guofeng Lv, Song Ci, and Hui Tang

Track: Multimedia Networking and Communications

Session ID: OT7

OT8: Multimedia Security and Privacy

Chairs: Patrizio Campisi, University of Roma TRE, Italy

Time: 13:30-15:10

Room: 102

Paper ID: 171

POSITION-PATCH BASED FACE HALLUCINATION VIA LOCALITY-CONSTRAINED REPRESENTATION

Junjun Jiang, Ruimin Hu, Zhen Han, Tao Lu, and Kebin Huang

Track: Multimedia Security and Privacy

Session ID: OT8

Paper ID: 478

LEARNING BOLTZMANN DISTANCE METRIC FOR FACE RECOGNITION

Truyen Tran, Dinh Q. Phung and Svetha Venkatesh

Track: Multimedia Security and Privacy

Session ID: OT8

Paper ID: 643

INTER-MODALITY FACE SKETCH RECOGNITION

Hamed Kiani Galoogahi, Terence Sim

Track: Multimedia Security and Privacy

Session ID: OT8

Paper ID: 401

A POLLUTION ATTACK TO PUBLIC-KEY WATERMARKING SCHEMES

Yongdong Wu, Robert H. Deng

Track: Multimedia Security and Privacy

Session ID: OT8

Paper ID: 113

AUTHENTICATING IMAGE METADATA ELEMENTS USING GEOLOCATION INFORMATION AND SUN DIRECTION ESTIMATION

Pravin Kakar and N. Sudha

Track: Multimedia Security and Privacy

Session ID: OT8

Afternoon Tea

Time: 15:10-15:40

Research Overview

Chairs: Hong Z. Tan, Microsoft Research Asia, China

Time: 15:40-16:40

Room: 105

Demo Session

Time: 16:40-18:30

Room: 102

see page 138

Poster Session (Tuesday)

PT1

Time: 16:40-18:30, 10th July 2012

Chairs: Xin-Jing Wang, MSRA, China

Room: 103

Paper ID: 292

A HIERARCHICAL MODEL FOR HUMAN INTERACTION RECOGNITION

Yu Kong and Yunde Jia

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 329

SOCIAL IMAGE TAGGING BY MINING SPARSE TAG PATTERNS FROM
AUXILIARY DATA

Jie Lin, Junsong Yuan, Ling-Yu Duan, Siwei Luo, Wen Gao

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 494

LEARNING GLOBAL AND RECONFIGURABLE PART-BASED MODELS
FOR OBJECT DETECTION

Xi Song, Tianfu Wu, Yi Xie, and Yunde Jia

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 581

SPIKING AND BLOCKING EVENTS DETECTION AND ANALYSIS IN
VOLLEYBALL VIDEOS

Chun-Chieh Hsu, Hua-Tsung Chen, Chien-Li Chou, Suh-Yin Lee

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 655

RECOGNITION OF MULTIPLE-FOOD IMAGES BY DETECTING
CANDIDATE REGIONS

Yuji Matsuda, Hajime Hoashi and Keiji Yanai

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 737

REGRESSION BASED POSE ESTIMATION WITH AUTOMATIC
OCCLUSION DETECTION AND RECTIFICATION

Ibrahim Radwan, Abhinav Dhall, Jyoti Joshi, Roland Goecke

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 356

2D FACE ALIGNMENT AND POSE ESTIMATION BASED ON 3D FACIAL
MODELS

Shen-Chi Chen, Chia-Hsiang Wu, Shih-Yao Lin, Yi-Ping Hung

Track: Multimedia Applications, Interface and Interaction
Session ID: PT1

Paper ID: 372

EFFICIENT TAG MINING VIA MIXTURE MODELING FOR REAL-TIME
SEARCH-BASED IMAGE ANNOTATION

Lican Dai, Xin-Jing Wang, Lei Zhang, Nenghai Yu

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 211

A LARGE SCALE EXPERIMENT FOR MOOD-BASED CLASSIFICATION
OF TV PROGRAMMES

Jana Eggink, Denise Bland

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 266

PER-EXEMPLAR FUSION LEARNING FOR VIDEO RETRIEVAL AND
RECOUNTING

Ilseo Kim, Sangmin Oh, A. G. Amitha Perera, Chin-Hui Lee

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PT1

Paper ID: 385

A FAST AND ROBUST PEDESTRIAN DETECTION FRAMEWORK BASED ON STATIC AND DYNAMIC INFORMATION

Tao Xu, Hong Liu, Yueliang Qian, Zhe Wang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 595

THE PERFORMANCE OF THE SPEAKING RATE PARAMETER IN EMOTION RECOGNITION FROM SPEECH

David Philippou-Hübner, Bogdan Vlasenko, Ronald Böck, Andreas Wendemuth

Track: Multimedia Signal Processing, System and Architect

Session ID: PT1

Paper ID: 607

LEAF SHAPE DESCRIPTOR FOR TREE SPECIES IDENTIFICATION

Itheri Yahiaoui, Olfa Mzoughi and Nozha Boujemaa

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 620

SALIENCY AWARE LOCALITY-PRESERVING CODING FOR IMAGE CLASSIFICATION

Quan Fang, Jitao Sang, Changsheng Xu,

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 398

NOISY TAG ALIGNMENT WITH IMAGE REGIONS

Yang Liu, Jing Liu, Zechao Li, Hanqing Lu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 601

RELATIVE RELEVANCE FEEDBACK IN IMAGE RETRIEVAL

Yuki Sugiyama, Makoto P. Kato, Hiroaki Ohshima, Katsumi Tanaka

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 162

MODELLING ATOMIC ACTIONS FOR ACTIVITY CLASSIFICATION

Jianguan Zhang, Benjamin Yao, Yongtian Wang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 170

LEARNING DETECTORS FROM LARGE DATASETS FOR OBJECT RETRIEVAL IN VIDEO SURVEILLANCE

Rogerio Feris, Sharath Pankanti, Behjat Siddiquie

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 397

COMPARISON OF CURVELET AND WAVELET TEXTURE FEATURES FOR CONTENT BASED IMAGE RETRIEVAL

Israt Jahan Sumana, Guojun Lu and Dengsheng Zhang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

Paper ID: 429

LEARNING SEMANTIC MOTION PATTERNS FOR DYNAMIC SCENES BY IMPROVED SPARSE TOPICAL CODING

Wei Fu, Jinqiao Wang, Zechao Li, Hanqing Lu, Songde Ma

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PT1

PT2

Chairs: Ruigang Yang, University of Kentucky, USA

Time: 16:40-18:30, 10th July 2012

Room: 103

Paper ID: 621

MULTI-PERSPECTIVE PANORAMAS OF LONG SCENES

Siyuan Fang, Neill Campbell

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 366

MULTI-HYPOTHESIS PROJECTION-BASED SHIFT ESTIMATION FOR
SWEEPING PANORAMA RECONSTRUCTION

Tuan Q. Pham, Philip Cox

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 102

SCENE SEGMENTATION AND PEDESTRIAN CLASSIFICATION FROM 3-
D RANGE AND INTENSITY IMAGES

Xue Wei, Son Lam Phung, and Abdesselam Bouzerdoun

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 457

DEPTH-BASED DISOCCLUSION FILLING FOR VIRTUAL VIEW
SYNTHESIS

Ilkoo Ahn and Changick Kim

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 702

VIRTUAL VIEW RECONSTRUCTION USING TEMPORAL INFORMATION
Shujie Liu, Philip A. Chou, Cha Zhang, Zhengyou Zhang, Chang Wen
Chen

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 245

WARPING-BASED NOVEL VIEW SYNTHESIS FROM A BINOCULAR
IMAGE FOR AUTOSTEREOSCOPIC DISPLAYS

Yu-Hsiang Huang, Tzu-Kuei Huang, Yan-Hsiang Huang, Wei-Chao
Chen, Yung-Yu Chuang

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 289

DEPTH TEMPLATE BASED 2D-TO-3D VIDEO CONVERSION AND CODING SYSTEM

Zhenyu Wang, Ronggang Wang, Shengfu Dong, Wei Wu, Longshe Huo, Wen Gao

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 680

STABLE POSE ESTIMATION WITH A MOTION MODEL IN REAL-TIME APPLICATION

Po-Chen Wu, Jui-Hsin Lai, Ja-Ling Wu, Shao-Yi Chien

Track: Multimedia Applications, Interface and Interaction

Session ID: PT2

Paper ID: 765

SYMMETRIC CLUSTER SET LEVEL OF DETAIL FOR REAL-TIME TERRAIN RENDERING

John Judnich and Nam Ling

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 232

FULL SPHERICAL HIGH DYNAMIC RANGE IMAGING FROM THE SKY
Fumio Okura, Masayuki Kanbara, Naokazu Yokoya

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 301

FACE SWAPPING UNDER LARGE POSE VARIATIONS: A 3D MODEL BASED APPROACH

Yuan Lin, Qian Lin, Feng Tang, Shengjin Wang

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 482

FOREGROUND-OBJECT-PROTECTED DEPTH MAP SMOOTHING FOR DIBR

Xiao-han Lu, Fang Wei, Fang-min Chen

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

Paper ID: 552

ACTIVITY RECOGNITION FROM RGB-D CAMERA WITH 3D LOCAL SPATIO-TEMPORAL FEATURES

Yue Ming, Qiuqi Ruan, Alexander G. Hauptmann

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PT2

PT3

Chairs: Patrizio Campisi, University of Roma TRE, Italy

Time: 16:40-18:30, 10th July 2012

Room: 104

Paper ID: 171

POSITION-PATCH BASED FACE HALLUCINATION VIA LOCALITY-CONSTRAINED REPRESENTATION

Junjun Jiang, Ruimin Hu, Zhen Han, Tao Lu, and Kebin Huang

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 478

LEARNING BOLTZMANN DISTANCE METRIC FOR FACE RECOGNITION

Truyen Tran, Dinh Q. Phung and Svetha Venkatesh

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 643

INTER-MODALITY FACE SKETCH RECOGNITION

Hamed Kiani Galoogahi, Terence Sim

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 401

A POLLUTION ATTACK TO PUBLIC-KEY WATERMARKING SCHEMES

Yongdong Wu, Robert H. Deng

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 113

AUTHENTICATING IMAGE METADATA ELEMENTS USING GEOLOCATION INFORMATION AND SUN DIRECTION ESTIMATION

Pravin Kakar and N. Sudha

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 419

RECOGNIZING OCCLUDED 3D FACES USING AN EFFICIENT ICP VARIANT

Peijiang Liu, Yunhong Wang, Di Huang and Zhaoxiang Zhang

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 541

CO-LDA: A SEMI-SUPERVISED APPROACH TO AUDIO-VISUAL PERSON RECOGNITION

Xuran Zhao, Nicholas Evans and Jean-Luc Dugelay

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 638

HUMAN DETECTION USING WAVELET-BASED CS-LBP AND A CASCADE OF RANDOM FORESTS

Deok-Yeon Kim, Joon-Young Kwak, ByoungChul Ko, Jae-Yeal Nam

Track: Multimedia Applications, Interface and Interaction

Session ID: PT3

Paper ID: 227

ROBUST FACE SUPER-RESOLUTION USING FREE-FORM DEFORMATIONS FOR LOW-QUALITY SURVEILLANCE VIDEO

Tomonari Yoshida, Tomokazu Takahashi, Daisuke Deguchi, Ichiro Ide and Hiroshi Murase

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 436

VIDEO COPY DETECTION USING A SOFT CASCADE OF MULTIMODAL FEATURES

Menglin Jiang, Yonghong Tian, Tiejun Huang

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 438

ROBUST IMAGE CONTENT AUTHENTICATION WITH TAMPER LOCATION

Li Weng, Geert Braeckman, Ann Dooms, Bart Preneel, Peter Schelkens

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 547

A DISTANCE-SENSITIVE ATTRIBUTE BASED CRYPTOSYSTEM FOR PRIVACY-PRESERVING QUERYING

Wei Sun, Shantanu Rane

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 637

CAMERA MODEL IDENTIFICATION USING LOCAL BINARY PATTERNS

Guanshuo Xu and Yun Qing Shi

Track: Multimedia Security and Privacy

Session ID: PT3

Paper ID: 246

THE EXTENDED CO-LEARNING FRAMEWORK FOR ROBUST OBJECT TRACKING

Chen Gong, Yang Liu, Tianyu Li, Jie Yang, Xiangjian He

Track: Multimedia Signal Processing, System and Architect

Session ID: PT3

PT4

Chairs: Gene Cheung, National Institute of Informatics, Japan

Time: 16:40-18:30, 10th July 2012

Room: 104

Paper ID: 587

A FAST AND PERFORMANCE-MAINTAINED TRANSCODING METHOD
BASED ON BACKGROUND MODELING FOR SURVEILLANCE VIDEO

Mingchao Geng, Xianguo Zhang, Yonghong Tian, Luhong Liang,
Tiejun Huang

Track: Multimedia Coding, Transcoding and Standards

Session ID: PT4

Paper ID: 700

A UNIFIED ESTIMATION-THEORETIC FRAMEWORK FOR ERROR-
RESILIENT SCALABLE VIDEO CODING

Jingning Han, Vinay Melkote, Kenneth Rose

Track: Multimedia Coding, Transcoding and Standards

Session ID: PT4

Paper ID: 365

SALIENCY-COGNIZANT ERROR CONCEALMENT IN LOSS-CORRUPTED
STREAMING VIDEO

Hadi Hadizadeh, Ivan V. Bajic, Gene Cheung

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 375

IMPACT OF REGION-OF-INTEREST VIDEO CODING ON PERCEIVED
QUALITY IN MOBILE VIDEO

Ivan Himawan, Wei Song, Dian Tjondronegoro

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PT4

Paper ID: 654

SOURCE DISTORTION TEMPORAL PROPAGATION MODEL FOR
MOTION COMPENSATED VIDEO CODING OPTIMIZATION

Tianwu Yang, Ce Zhu, Xiaojie Fan, Qiang Peng

Track: Multimedia Coding, Transcoding and Standards

Session ID: PT4

Paper ID: 235

TRAFFIC REDUCTION FOR MULTIPLE USERS IN MULTI-VIEW VIDEO
STREAMING

Takuya Fujihashi, Ziyuan Pan, Takashi Watanabe

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 699

QOS-DRIVEN AND FAIR DOWNLINK SCHEDULING FOR VIDEO STREAMING OVER LTE NETWORKS WITH DEADLINE AND HARD HAND-OFF

Qian Liu, Zixuan Zou, Chang Wen Chen

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 526

BAND CODES: CONTROLLED COMPLEXITY NETWORK CODING\\FOR PEER-TO-PEER VIDEO STREAMING

Attilio Fiandrotti, Valerio Bioglio, Enrico Magli, Marco Grangetto, Rossano Gaeta

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 546

RANDOM NETWORK CODING FOR MULTIMEDIA DELIVERY OVER LTE-ADVANCED

Dejan Vukobratovic, Chadi Khirallah, Vladimir Stankovic, John Thompson

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 551

A CROSS-LAYER VIDEO TRANSMISSION SCHEME WITH GUARANTEED END-TO-END QOS OVER MIMO OFDM SYSTEMS

Yahui Hu, Guofeng Lv, Song Ci, and Hui Tang

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 224

DISTRIBUTED JOINT CHANNEL AND ROUTING ASSIGNMENT FOR MULTIMEDIA WIRELESS MESH NETWORKS

W.-L. Warner Hong, Fei Long, Pengye Xia, S.-H. Gary Chan

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 565

ACCURACY AND POWER CONSUMPTION TRADEOFFS IN VIDEO RATE ADAPTATION FOR COMPUTER VISION APPLICATIONS

Yousef O. Sharrah and Nabil J. Sarhan

Track: Multimedia Networking and Communications

Session ID: PT4

Paper ID: 642

RESOURCE-DISTORTION MODELING FOR VIDEO STREAMING OVER
MESH NETWORKS WITH PRIORITY-BASED PACKET SCHEDULING

Yongfei Zhang, Yunsheng Zhang, Shiyin Qin, Zhihai He

Track: Multimedia Networking and Communications

Session ID: PT4

11th July 2012, Morning

Keynote: Chang Wen Chen

State University of New York at Buffalo, USA

Time: 9:00-10:00

Room: 105

Student Travel Grant Outcome Announcement

Time: 9:00-10:00

Coffee Break

Time: 10:00-10:30

Time Machine Plenary Session

Time: 10:30-12:30

Room: 105

Paper ID: EP1

Expert Talk for Time Machine Session: Dynamic Time Warping New Youth

Xavier Anguera, Telefonica, Spain

Track: Expert Talk

Session ID: TM

Paper ID: EP2

Expert Talk for Time Machine Session: Designing Calm Technology
“...as Refreshing as Taking a Walk in the Woods”

John N.A. Brown, Alpen-Adria Universität Klagenfurt, Austria &
Universitat Politècnica de Catalunya, Spain

Track: Expert Talk

Session ID: TM

Paper ID: EP3

Expert Talk for Time Machine Session: Affective Multimedia Analysis:
Introduction, Background and Perspectives

Mohammad Soleymani, Imperial College London, UK

Track: Expert Talk

Session ID: TM

Paper ID: EP4

Expert Talk for Time Machine Session: High Order Entropy Coding –
From Conventional Video Coding to Distributed
Video Coding

Wenjun Zeng University of Missouri, USA

Track: Expert Talk

Session ID: TM

Lunch

Time: 12:30-13:40

11th July 2012, Afternoon

OW1: Multimedia Content Analysis, understanding and Retrieval III

Chairs: Zicheng Liu, MSRA, China

Time: 13:40-15:00

Room: 103

Paper ID: 734

ONTOLOGICAL INFERENCE FRAMEWORK WITH JOINT ONTOLOGY
CONSTRUCTION AND LEARNING FOR IMAGE UNDERSTANDING

Shen-Fu Tsai, Hao Tang, Feng Tang and Thomas S. Huang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OW1

Paper ID: 402

VIEW INDEPENDENT COMPUTER LIP-READING

Yuxuan Lan, Barry-John Theobald and Richard Harvey

Track: Multimedia Applications, Interface and Interaction

Session ID: OW1

Paper ID: 110

VIDEO GAZE PREDICTION: MINIMIZING PERCEPTUAL INFORMATION
LOSS

Junyong You

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OW1

Paper ID: 533

CLASS-BASED COLOR BAG OF WORDS FOR FASHION RETRIEVAL

Costantino Grana, Daniele Borghesani, Rita Cucchiara

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OW1

OW2: Acoustic Signal Analysis & Processing

Chairs: Julien Epps, The University of New South Wales, Australia

Time: 13:40-15:00

Room: 101

Paper ID: 744

NINE VOICES, ONE ARTIST: LINGUISTIC AND ACOUSTIC ANALYSIS

Talal Bin Amin, Pina Marziliano, James Sneed German

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OW2

Paper ID: 475

MASK: ROBUST LOCAL FEATURES FOR AUDIO FINGERPRINTING

Xavier Anguera, Antonio Garzon and Tomasz Adamek

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OW2

Paper ID: 624

CREATING THE SYDNEY YORK MORPHOLOGICAL AND ACOUSTIC
RECORDINGS OF EARS DATABASE

P. Guillon, R. Zolfaghari, N. Epain, A. van Schaik, C.T. Jin, C.
Hetherington, J. Thorpe and A. Tew

Track: Multimedia Signal Processing, System and Architect

Session ID: OW2

Paper ID: 174

BLIND SPEECH DEREVERBERATION BASED ON A STATISTICAL MODEL

Xulei Bao, Jie Zhu, Zhen Huang

Track: Multimedia Signal Processing, System and Architect

Session ID: OW2

OW3: Media coding & transcoding II

Chairs: Manzur Murshed, Monash University, Australia

Xiaoyan Sun, MSRA, China

Time: 13:40-15:00

Room: 104

Paper ID: 730

SIFT-BASED IMAGE COMPRESSION

Huanjing Yue, Xiaoyan Sun, Feng Wu, Jingyu Yang

Track: Multimedia Coding, Transcoding and Standards

Session ID: OW3

Paper ID: 682

LAGRANGE-BASED VIDEO ENCODER OPTIMISATION TO ENHANCE
MOTION REPRESENTATION IN THE COMPRESSED-DOMAIN

R.M.T.P. Rajakaruna, W.A.C. Fernando and J. Calic

Track: Multimedia Coding, Transcoding and Standards

Session ID: OW3

Paper ID: 751

A MODEL PREDICTIVE CONTROLLER FOR FRAME-LEVEL RATE
CONTROL IN MULTIVIEW VIDEO CODING

Bruno Boessio Vizzotto, Bruno Zatt, Muhammad Shafique, Sergio
Bampi, Jörg Henkel

Track: Multimedia Coding, Transcoding and Standards

Session ID: OW3

Paper ID: 155

AN ADAPTIVE DYNAMIC SCHEDULING SCHEME FOR H.264/AVC
DECODING ON MULTICORE ARCHITECTURE

Dung Vu, Jilong Kuang, Laxmi Bhuyan

Track: Multimedia Applications, Interface and Interaction

Session ID: OW3

OW4: Special session - Perceptual Visual Signal Coding and Display

Chairs: Henry Wu, The Royal Melbourne Institute of Technology (RMIT), Australia

Anil Fernando, University of Surrey, United Kingdom

Time: 13:40-15:00

Room: 102

Paper ID: 260

SSIM-INSPIRED PERCEPTUAL VIDEO CODING FOR HEVC

Abdul Rehman and Zhou Wang

Track: Multimedia Coding, Transcoding and Standards

Session ID: OW4

Paper ID: 512

PERCEPTION OF TEMPORAL PUMPING ARTIFACT IN VIDEO CODING WITH THE HIERARCHICAL PREDICTION STRUCTURE

Shuai Wan, Yanchao Gong, Fuzheng Yang

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OW4

Paper ID: 558

SYSTEM DESIGN OF PERCEPTUAL QUALITY-REGULABLE H.264 VIDEO ENCODER

Guan-Lin Wu, Yu-Jie Fu, and Shao-Yi Chien

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OW4

Paper ID: 410

SUBJECTIVE CROSSTALK ASSESSMENT METHODOLOGY FOR AUTO-STEREOSCOPIC DISPLAYS

Liyuan Xing, Jie Xu, Kim Skildheim, Andrew Perkis, Touradj Ebrahimi

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OW4

Afternoon Tea

Time: 15:00-15:30

Research Overview

Chair: Kristen Grauman, University of Texas at Austin, USA

Time: 15:30-16:30

Room: 105

Poster Session (Wednesday)

PW1

Chairs: Roland Goecke, University of Canberra, Australia

Time: 16:30-18:00, 11th July 2012

Room: 103

Paper ID: 798

DISCOVERING SOCIAL PHOTO NAVIGATION PATTERNS

Luca Chiarandini, Michele Trevisiol, Alejandro Jaimes

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 665

GROUP RECOMMENDATION USING EXTERNAL FOLLOWEE FOR
SOCIAL TV

Xiaoyan Wang, Lifeng Sun, ZhiWang and Da Meng

Track: Multimedia Applications, Interface and Interaction

Session ID: PW1

Paper ID: 459

MULTIMODAL LOCATION ESTIMATION OF CONSUMER MEDIA:
DEALING WITH SPARSE TRAINING DATA

Jaeyoung Choi, Gerald Friedland, Venkatesan Ekambaram, Kannan
Ramchandran

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 257

EMPOWERING CROSS-DOMAIN INTERNET MEDIA WITH REAL-TIME
TOPIC LEARNING FROM SOCIAL STREAMS

Suman D. Roy, Tao Mei, Wenjun Zeng, Shipeng Li

Track: Multimedia Applications, Interface and Interaction

Session ID: PW1

Paper ID: 747

MEDIA LIFECYCLE AND CONTENT ANALYSIS IN SOCIAL MEDIA COMMUNITIES

Lexing Xie, Hari Sundaram

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 734

ONTOLOGICAL INFERENCE FRAMEWORK WITH JOINT ONTOLOGY CONSTRUCTION AND LEARNING FOR IMAGE UNDERSTANDING

Shen-Fu Tsai, Hao Tang, Feng Tang and Thomas S. Huang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 402

VIEW INDEPENDENT COMPUTER LIP-READING

Yuxuan Lan, Barry-John Theobald and Richard Harvey

Track: Multimedia Applications, Interface and Interaction

Session ID: PW1

Paper ID: 110

VIDEO GAZE PREDICTION: MINIMIZING PERCEPTUAL INFORMATION LOSS

Junyong You

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 533

CLASS-BASED COLOR BAG OF WORDS FOR FASHION RETRIEVAL

Costantino Grana, Daniele Borghesani, Rita Cucchiara

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 435

AN EFFICIENT QUERY-BY-SINGING/HUMMING SYSTEM BASED ON FAST FOURIER TRANSFORMS OF NOTE SEQUENCES

Wei-Ho Tsai, Yu-Ming Tu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 543

UNSUPERVISED MINING OF MULTIPLE AUDIOVISUALLY CONSISTENT CLUSTERS FOR VIDEO STRUCTURE ANALYSIS

Anh-Phuong TA1 and Guillaume Gravier

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 738

A NOVEL VIDEO-BASED SMOKE DETECTION METHOD USING IMAGE SEPARATION

Hongda Tian, Wanqing Li, Lei Wang, Philip Ogunbona

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 437

VISUAL SUMMARIZATION OF THE SOCIAL IMAGE COLLECTION USING IMAGE ATTRACTIVENESS LEARNED FROM SOCIAL BEHAVIORS

Jin-Woo Jeong, Hyun-Ki Hong, Jee-Uk Heu, Iqbal Qasim, Dong-Ho Lee

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 776

REAL-TIME STORYBOARD GENERATION FOR H.264/AVC COMPRESSED VIDEOS

Pei Dong, Yong Xia, David Dagan Feng

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 106

THE IMAGE MATTING METHOD WITH REGULARIZED MATTE

Junbin Gao, Manoranjan Paul, Jun Liu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 136

RADON-BASED AUDIO CLASSIFICATION FEATURES

Ruben Gonzalez

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 564

VIDEO COPY DETECTION USING INCLINED VIDEO TOMOGRAPHY AND BAG-OF-VISUAL-WORDS

Hyun-seok Min, Se Min Kim, Wesley De Neve, Yong Man Ro

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

Paper ID: 574

IMAGE CLASSIFICATION WITH GROUP FUSION SPARSE REPRESENTATION

Yanan Liu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW1

PW2

Chairs: Xavier Anguera, Telefonica, Spain

Time: 16:30-18:00, 11th July 2012

Room: 103

Paper ID: 5

JOINT EXAMPLE-BASED DEPTH MAP SUPER-RESOLUTION

Yanjie Li, Tianfan Xue, Lifeng Sun, Jianzhuang Liu

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 371

SPATIOTEMPORAL SALIENCY DETECTION VIA SPARSE REPRESENTATION

Zhixiang Ren, Shenghua Gao, Deepu Rajan, Liang-Tien Chia, Yun Huang

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW2

Paper ID: 434

CONTEXT-AWARE SINGLE IMAGE RAIN REMOVAL

De-An Huang, Li-Wei Kang, Min-Chun Yang, Chia-Wen Lin, Yu-Chiang Frank Wang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 294

FROM 2D EXTRAPOLATION TO 1D INTERPOLATION: CONTENT ADAPTIVE IMAGE BIT-DEPTH EXPANSION

Pengfei Wan, Oscar C. Au, Ketan Tang, Yuanfang Guo, Lu Fang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 503

VIEW-INVARIANT FALL DETECTION SYSTEM BASED ON SILHOUETTE AREA AND ORIENTATION

Behzad Mirmahboub, Shadrokh Samavi, Nader Karimi, Shahram Shirani

Track: Multimedia Applications, Interface and Interaction

Session ID: PW2

Paper ID: 744

NINE VOICES, ONE ARTIST: LINGUISTIC AND ACOUSTIC ANALYSIS

Talal Bin Amin, Pina Marziliano, James Sneed German

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW2

Paper ID: 475

MASK: ROBUST LOCAL FEATURES FOR AUDIO FINGERPRINTING

Xavier Anguera, Antonio Garzon and Tomasz Adamek

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW2

Paper ID: 624

CREATING THE SYDNEY YORK MORPHOLOGICAL AND ACOUSTIC RECORDINGS OF EARS DATABASE

P. Guillon, R. Zolfaghari, N. Epain, A. van Schaik, C.T. Jin, C. Hetherington, J. Thorpe and A. Tew

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 174

BLIND SPEECH DEREVERBERATION BASED ON A STATISTICAL MODEL

Xulei Bao, Jie Zhu, Zhen Huang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 247

SELF-LEARNING OF EDGE-PRESERVING SINGLE IMAGE SUPER-RESOLUTION

Min-Chun Yang, De-An Huang, Chih-Yun Tsai, Yu-Chiang Frank Wang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 255

PRINCIPAL COMPONENTS ANALYSIS-BASED EDGE-DIRECTED IMAGE INTERPOLATION

Bing Yang, Zhiyong Gao and Xiaoyun Zhang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 382

A ROBUST HOMOGRAPHY ESTIMATION METHOD BASED ON KEYPOINT CONSENSUS AND APPEARANCE SIMILARITY

Qing Yan, Yi Xu, Xiaokang Yang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 518

EXPLOITING IMAGE LOCAL AND NONLOCAL CONSISTENCY FOR MIXED GAUSSIAN-IMPULSE NOISE REMOVAL

Jian Zhang, Ruiqin Xiong, Chen Zhao, Siwei Ma, and Debin Zhao

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 175

FRAME RATE UP-CONVERSION FOR DEPTH-BASED 3D VIDEO

Qingchun Lu, Xiangzhong Fang, Chong Xu, Yongzhe Wang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 195

COLOR FILTER ARRAY DEMOSAICKING USING SELF-VALIDATION
FRAMEWORK

Ting-Chun Wang, Yi-Nung Liu and Shao-Yi Chien

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 639

EFFICIENT SINGLE IMAGE SUPER-RESOLUTION VIA GRAPH
EMBEDDING

Junjun Jiang, Ruimin Hu, Zhen Han, Kebin Huang, and Tao Lu

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

Paper ID: 153

EXPLOITING STRUCTURED SPARSITY FOR IMAGE DEBLURRING

Haichao Zhang, Yanning Zhang and Thomas S. Huang

Track: Multimedia Signal Processing, System and Architect

Session ID: PW2

PW3

Chairs: Ce Zhu, Nanyang Technological University, Singapore

Time: 16:30-18:00, 11th July 2012

Room: 104

Paper ID: 730

SIFT-BASED IMAGE COMPRESSION

Huanjing Yue, Xiaoyan Sun, Feng Wu, Jingyu Yang

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 682

LAGRANGE-BASED VIDEO ENCODER OPTIMISATION TO ENHANCE
MOTION REPRESENTATION IN THE COMPRESSED-DOMAIN

R.M.T.P. Rajakaruna, W.A.C. Fernando and J. Calic

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 751

A MODEL PREDICTIVE CONTROLLER FOR FRAME-LEVEL RATE
CONTROL IN MULTIVIEW VIDEO CODING

Bruno Boessio Vizzotto, Bruno Zatt, Muhammad Shafique, Sergio
Bampi, Jörg Henkel

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 155

AN ADAPTIVE DYNAMIC SCHEDULING SCHEME FOR H.264/AVC
DECODING ON MULTICORE ARCHITECTURE

Dung Vu, Jilong Kuang, Laxmi Bhuyan

Track: Multimedia Applications, Interface and Interaction

Session ID: PW3

Paper ID: 260

SSIM-INSPIRED PERCEPTUAL VIDEO CODING FOR HEVC

Abdul Rehman and Zhou Wang

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 512

PERCEPTION OF TEMPORAL PUMPING ARTIFACT IN VIDEO CODING
WITH THE HIERARCHICAL PREDICTION STRUCTURE

Shuai Wan, Yanchao Gong, Fuzheng Yang

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PW3

Paper ID: 558

SYSTEM DESIGN OF PERCEPTUAL QUALITY-REGULABLE H.264 VIDEO ENCODER

Guan-Lin Wu, Yu-Jie Fu, and Shao-Yi Chien

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PW3

Paper ID: 410

SUBJECTIVE CROSSTALK ASSESSMENT METHODOLOGY FOR AUTO-STEREOSCOPIC DISPLAYS

Liyuan Xing, Jie Xu, Kim Skildheim, Andrew Perkis, Touradj Ebrahimi

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PW3

Paper ID: 414

CLUSTERING BASED SEARCH ALGORITHM FOR MOTION ESTIMATION

Ke Chen, Zhong Zhou, Wei Wu

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 305

ENHANCED PRINCIPAL COMPONENT USING POLAR COORDINATE PCA FOR STEREO AUDIO CODING

Shi Dong, Ruimin Hu, Weiping Tu, Xiang Zheng, Junjun Jiang, Song Wang

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 707

SYNTHESIZED VIEW DISTORTION BASED 3D VIDEO CODING FOR EXTRAPOLATION AND INTERPOLATION OF VIEWS

Gerhard Tech, Heiko Schwarz, Karsten Müller and Thomas Wiegand

Track: Multimedia Coding, Transcoding and Standards

Session ID: PW3

Paper ID: 323

PERCEIVED PICTURE QUALITY OF FRAME-COMPATIBLE 3DTV VIDEO FORMATS

Filippo Speranza, Ron Renaud, Andre Vincent and Wa J. Tam

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PW3

Paper ID: 579

A JOINT TEXTURE/DEPTH EDGE-DIRECTED UP-SAMPLING ALGORITHM FOR DEPTH MAP CODING

Huiping Deng, Li Yu, Jinbo Qiu and Juntao Zhang

Track: Multimedia Coding, Transcoding and Standards
Session ID: PW3

Paper ID: 589

FAST TRANSCODING FROM H.264 AVC TO HIGH EFFICIENCY VIDEO CODING

Dong Zhang, Bin Li, Jizheng Xu, and Houqiang Li

Track: Multimedia Coding, Transcoding and Standards
Session ID: PW3

Paper ID: 729

MOTION VECTORS MERGING: LOW COMPLEXITY PREDICTION UNIT DECISION HEURISTIC FOR THE INTER-PREDICTION OF HEVC ENCODERS

Felipe Sampaio, Sergio Bampi, Mateus Grellert, Luciano Agostini, Julio Mattos

Track: Multimedia Coding, Transcoding and Standards
Session ID: PW3

Paper ID: 275

OPTIMAL BIT-ALLOCATION FOR WAVELET-BASED SCALABLE VIDEO CODING

Guan-Ju Peng, Wen-Liang Hwang, Sao-Jie Chen

Track: Multimedia Coding, Transcoding and Standards
Session ID: PW3

PW4

Chairs: Chia-Wen Lin, National Tsing Hua University, Taiwan

Time: 16:30-18:00, 11th July 2012

Room: 104

Paper ID: 333

POOLING SEARCH: SERUM SAMPLES TEST SIMULATED VIDEO
FINGERPRINT SEARCH

Jincao Yao, Huimin Yu, Roland Hu

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 115

FINDING SUBGROUPS IN A FLICKR GROUP

Sumit Negi, Santanu Chaudhury

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW4

Paper ID: 542

BRINGING VIDEOS TO SOCIAL MEDIA

Stephan Kopf, Stefan Wilk, Wolfgang Effelsberg

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 736

SEE-THROUGH IMAGE ENHANCEMENT THROUGH SENSOR FUSION

Bo Fu, Mao Ye, Ruigang Yang, Cha Zhang

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 324

VIDEO BASED REAL-WORLD REMOTE TARGET TRACKING ON
SMARTPHONES

Qia Wang, Alex Lobzhanidze, Hyun I. Jang, Wenjun Zeng and Yi
Shang

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 562

LUMIPEN: PROJECTION-BASED MIXED REALITY FOR DYNAMIC
OBJECTS

Kohei Okumura, Hiromasa Oku and Masatoshi Ishikawa

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 108

REAL-TIME HAND POSE ESTIMATION FROM RGB-D SENSOR

Yuan Yao, Yuan Yao, Yun Fu

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 192

ON-LINE OBJECT RECONSTRUCTION AND TRACKING FOR 3D INTERACTION

Youji Feng, Yihong Wu, Lixin Fan

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 134

ADAPTIVE CODING WITH CPU ENERGY CONSERVATION FOR MOBILE VIDEO CALLS

Haiyang Ma, Roger Zimmermann

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 576

AN IMPROVED TEMPLATE-BASED APPROACH TO KEYWORD SPOTTING APPLIED TO THE SPOKEN CONTENT OF USER GENERATED VIDEO BLOGS

UOW M. S. Barakat, C. H. Ritz, D. A. Stirling

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PW4

Paper ID: 733

A CONTEXT-AWARE DESCRIPTION FOR CONTENT FILTERING ON VIDEO SHARING SOCIAL NETWORKS

Antonio da Luz*, Eduardo Valle, Arnaldo de A. Araújo

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 766

PREDICTING IMAGE POPULARITY IN AN INCOMPLETE SOCIAL MEDIA COMMUNITY BY A WEIGHTED BI-PARTITE GRAPH

Xiang Niu, Lusong Li, Tao Mei, Jialie Shen, Ke Xu

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

Paper ID: 280

ERROR MODELING AND ESTIMATION FUSION FOR INDOOR LOCALIZATION

Weipeng Zhuo, Bo Zhang, S.-H. Gary Chan, Edward Y. Chang

Track: Multimedia Applications, Interface and Interaction

Session ID: PW4

ICME 2012 Conference Banquet in Melbourne Casio function hall

Time: 19:00-22:00

Best Papers and Best Student Papers Outcome Announcement

12th July 2012, Morning

Keynote: Baining Guo

Microsoft Research Asia, China

Time: 9:00-10:00

Room: 105

Morning Tea

Time: 10:00-10:30

OH1: Multimedia Content Analysis, understanding and Retrieval IV

Chairs: Leixing Xie, Australian National University, Australia
Mei-Ling Shyu, University of Miami, USA

Time: 10:30-11:50

Room: 103

Paper ID: 775

VIDEO EVENT DETECTION USING TEMPORAL PYRAMIDS OF VISUAL SEMANTICS WITH KERNEL OPTIMIZATION AND MODEL SUBSPACE BOOSTING

Noel C. F. Codella, Apostol Natsev, Gang Hua, Matthew Hill, Liangliang Cao, Leiguang Gong, John R. Smith

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: OH1

Paper ID: 169

GROUPLET-BASED DISTANCE METRIC LEARNING FOR VIDEO CONCEPT DETECTION

Wei Jiang, Alexander C. Loui

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: OH1

Paper ID: 234

RATIO VOTING: A NEW VOTING STRATEGY FOR LARGE-SCALE IMAGE RETRIEVAL

Yusuke Uchida, Koichi Takagi, Shigeyuki Sakazawa

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: OH1

Paper ID: 336

TOPOLOGY PRESERVED REGULAR SUPERPIXEL

Dai Tang, Huazhu Fu, Xiaochun Cao

Track: Multimedia Applications, Interface and Interaction
Session ID: OH1

OH2: Multimedia System and Architecture

Chairs: Gary Chan, The Hong Kong University of Science and Technology, HongKong

Jeroen Vendrig, Canon Information Systems Research Australia (CiSRA), Australia

Time: 10:30-11:50

Room: 101

Paper ID: 287

GPU AND CPU COOPERATIVE ACCELERATION FOR FACE DETECTION ON MODERN PROCESSORS

Eric Li, Bin Wang, Liu Yang, Ya-ti Peng, Yangzhou Du, Yimin Zhang, Yi-Jen Chiu

Track: Multimedia Signal Processing, System and Architect

Session ID: OH2

Paper ID: 203

AREA AND MEMORY EFFICIENT ARCHITECTURES FOR 3D BLU-RAY-COMPLIANT MULTIMEDIA PROCESSORS

Chi-Cheng Ju, Tsu-Ming Liu, Yeh-Lin Chu, Chuang-Chi Chiou, Bin-Jung Tsai, Te-Chi Hsiao, Ginny Chen, Pin-Huan Hsu, Chih-Ming Wang, Chun-Chia Chen, Hue-Min Lin, Chia-Yun Cheng, Min-Hao Chiu, Sheng-Jen Wang, Jiun-Yuan Wu, Yuan-Chun Lin, Yung-Chang Chang, Chu

Track: Multimedia Signal Processing, System and Architect

Session ID: OH2

Paper ID: 342

ENERGY-AWARE OPERATION OF BLACK BOX SURVEILLANCE CAMERAS UNDER EVENT UNCERTAINTY AND MEMORY CONSTRAINT

Giwon Kim, Jungsoo Kim, Jongpil Jung, Chong-Min Kyung

Track: Multimedia Security and Privacy

Session ID: OH2

Paper ID: 626

A UNIFIED 4/8/16/32-POINT INTEGER IDCT ARCHITECTURE FOR MULTIPLE VIDEO CODING STANDARDS

Sha Shen, Weiwei Shen, Yibo Fan, Xiaoyang Zeng

Track: Multimedia Coding, Transcoding and Standards

Session ID: OH2

OH3: Multimedia Applications

Chairs: Jingdong Wang, Microsoft Research Asia

Martha Larson, Delft University of Technology, The
Netherlands

Time: 10:30-11:50

Room: 104

Paper ID: 537

3D HEAD POSE ESTIMATION BASED ON SCENE FLOW AND GENERIC
HEAD MODEL

Peng Liu, Michael Reale, Lijun Yin

Track: Multimedia Applications, Interface and Interaction

Session ID: OH3

Paper ID: 328

EFFICIENT SUPER-RESOLUTION BY FINER SUB-PIXEL MOTION
PREDICTION AND BILATERAL FILTERING

Damith J. Mudugamuwa, Xiangjian He, Wenjing Jia

Track: Multimedia Signal Processing, System and Architect

Session ID: OH3

Paper ID: 285

AUTOMATIC VIDEO EDITING FOR VIDEO-BASED INTERACTIVE
STORYTELLING

Edirlei Soares de Lima, Bruno Feijó, Cesar Pozzer, Angelo Ciarlini,
Antonio Furtado

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OH3

Paper ID: 759

CROWDSOURCED LEARNING TO PHOTOGRAPH VIA MOBILE
DEVICES

Wenyuan Yin, Tao Mei, Chang Wen Chen

Track: Multimedia Applications, Interface and Interaction

Session ID: OH3

OH4: Multimedia Perceptual Assessment and Signal Processing

Chairs: Ebrahimi Touradj, EPFL, Switzerland

Shao-Yi Chien, National Taiwan University, Taiwan

Time: 10:30-11:50

Room: 102

Paper ID: 319

PAUSE INTENSITY: A NO-REFERENCE QUALITY ASSESSMENT METRIC FOR VIDEO STREAMING IN TCP NETWORKS

Colin Bailey, Mirghiasaldin Seyedebrahimi, Xiao-Hong Peng

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OH4

Paper ID: 158

VISUAL CONTRAST SENSITIVITY GUIDED VIDEO QUALITY ASSESSMENT

Junyong You, Liyuan Xing, Andrew Perkis, Touradj Ebrahimi

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OH4

Paper ID: 248

GAUSSIAN NOISE LEVEL ESTIMATION IN SVD DOMAIN FOR IMAGES

Wei Liu, Weisi Lin

Track: Multimedia Quality Assessment and Quality Experien

Session ID: OH4

Paper ID: 672

REDUCING BLOCKING ARTIFACTS IN COMPRESSED IMAGES VIA TRANSFORM-DOMAIN NON-LOCAL COEFFICIENTS ESTIMATION

Xinfeng Zhang, Ruiqin Xiong, Siwei Ma, Wen Gao

Track: Multimedia Signal Processing, System and Architect

Session ID: OH4

Lunch

Time: 11:50-13:10

12th July 2012, Afternoon

OH5: Multimedia Content Analysis, understanding and Retrieval V

Chairs: Tao Mei, MSRA, China

Jingdong Wang, MSRA, China

Time: 13:10-14:30

Room: 103

Paper ID: 302

FAST NEAR-DUPLICATE VIDEO RETRIEVAL VIA MOTION TIME SERIES MATCHING

John R. Zhang, Jennifer Y. Ren, Fangzhe Chang, Thomas L. Wood, John R. Kender

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OH5

Paper ID: 495

3D STORYBOARDS FOR INTERACTIVE VISUAL SEARCH

Klaus Schoeffmann, David Ahlström, Laszlo Böszörményi

Track: Multimedia Applications, Interface and Interaction

Session ID: OH5

Paper ID: 510

FROM TEXT DETECTION IN VIDEOS TO PERSON IDENTIFICATION

Johann Poignant, Laurent Besacier, Georges Qu'énou, Franck Thollard

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OH5

Paper ID: 749

LEVERAGING CONCEPT ASSOCIATION NETWORK FOR MULTIMEDIA RARE CONCEPT MINING AND RETRIEVAL

Tao Meng, Mei-Ling Shyu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: OH5

OH6: Multimedia Signal Processing

Chairs: Deepu Rajan, Nanyang Technological University, Singapore

Time: 13:10-14:30

Room: 104

Paper ID: 548

A NOVEL PROGRESSIVE IMAGE SCANNING AND RECONSTRUCTION
SCHEME BASED ON COMPRESSED SENSING AND LINEAR
PREDICTION

Giulio Coluccia, Enrico Magli

Track: Multimedia Signal Processing, System and Architect

Session ID: OH6

Paper ID: 379

GRAPH-BASED SEQUENTIAL PARTICLE FILTERING FRAMEWORK FOR
ARTICULATED MOTION ANALYSIS

Jing Huang and Dan Schonfeld

Track: Multimedia Signal Processing, System and Architect

Session ID: OH6

Paper ID: 474

A NOVEL VIEW-LEVEL TARGET BIT RATE DISTRIBUTION ESTIMATION
TECHNIQUE FOR REAL-TIME MULTI-VIEW VIDEO PLUS DEPTH

Mario Cordina, Carl J. Debono

Track: Multimedia Signal Processing, System and Architect

Session ID: OH6

Paper ID: 506

COMBINED INTER-FRAME AND INTER-COLOR PREDICTION FOR
COLOR VIDEO DENOISING

Jingjing Dai, Oscar C. Au, Chao Pang and Feng Zou

Track: Multimedia Signal Processing, System and Architect

Session ID: OH6

OH7: 3D Media

Chairs: Cha Zhang, Microsoft, USA

Time: 13:10-14:30

Room: 101

Paper ID: 466

AN AUGMENTED REALITY 3D POP-UP BOOK: THE DEVELOPMENT OF
A MULTIMEDIA PROJECT FOR ENGLISH LANGUAGE TEACHING

Poonsri Vate-U-Lan

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OH7

Paper ID: 267

A NOVEL FRAMEWORK FOR 3D COMPUTER ANIMATION SYSTEMS
FOR NONPROFESSIONAL USERS USING AN AUTOMATIC RIGGING
ALGORITHM

Natapon Pantuwong and Masanori Sugimoto

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OH7

Paper ID: 124

UNSUPERVISED CONVERSION OF 3D MODELS FOR INTERACTIVE
METAVERSES

Jeff Terrace, Ewen Cheslack-Postava, Philip Levis, and Michael J.
Freedman

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: OH7

OH8: Media Coding and Delivery

Chairs: Manzur Murshed, Monash University, Australia

Gary Chan, The Hong Kong University of Science and
Technology, HongKong

Time: 13:10-14:30

Room: 102

Paper ID: 427

LIPS: A LIGHTWEIGHT INTER-LAYER PROTECTION SCHEME FOR
SCALABLE VIDEO CODING

Shih-Ying Chang, Hsin-Ta Chiao

Track: Multimedia Networking and Communications

Session ID: OH8

Paper ID: 196

EFFECTIVE SPATIAL DATA BROADCASTING

Chung-Hua Chu

Track: Multimedia Networking and Communications

Session ID: OH8

Paper ID: 550

PRIME: PRE-REGISTRATION FOR IMS MOBILITY ENHANCEMENT

Abolfazl Nazari, Jason But, Philip Branch, Hai Vu

Track: Multimedia Networking and Communications

Session ID: OH8

Paper ID: 716

COMPLEXITY MODELING OF THE MOTION COMPENSATION
PROCESS OF THE H.264/AVC VIDEO CODING STANDARD

Mehdi Semsarzadeh, Mohsen Jamali Langroodi, Mahmoud Reza
Hashemi, Shervin Shirmohammadi

Track: Multimedia Coding, Transcoding and Standards

Session ID: OH8

Afternoon Tea

Time: 14:30-15:00

Research Overview:

Chairs: David Taubman, the University of New South Wales, Australia

Time: 15:00-16:00

Room: 105

Poster Session (Thursday)

PH1

Chairs: Mei-Ling Shyu, University of Miami, USA

Time: 16:00-17:30, 12th July 2012

Room: 103

Paper ID: 775

VIDEO EVENT DETECTION USING TEMPORAL PYRAMIDS OF VISUAL SEMANTICS WITH KERNEL OPTIMIZATION AND MODEL SUBSPACE BOOSTING

Noel C. F. Codella, Apostol Natsev, Gang Hua, Matthew Hill, Liangliang Cao, Leiguang Gong, John R. Smith

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 169

GROUPLET-BASED DISTANCE METRIC LEARNING FOR VIDEO CONCEPT DETECTION

Wei Jiang, Alexander C. Loui

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 234

RATIO VOTING: A NEW VOTING STRATEGY FOR LARGE-SCALE IMAGE RETRIEVAL

Yusuke Uchida, Koichi Takagi, Shigeyuki Sakazawa

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 336

TOPOLOGY PRESERVED REGULAR SUPERPIXEL

Dai Tang, Huazhu Fu, Xiaochun Cao

Track: Multimedia Applications, Interface and Interaction

Session ID: PH1

Paper ID: 302

FAST NEAR-DUPLICATE VIDEO RETRIEVAL VIA MOTION TIME SERIES MATCHING

John R. Zhang, Jennifer Y. Ren, Fangzhe Chang, Thomas L. Wood, John R. Kender

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 495

3D STORYBOARDS FOR INTERACTIVE VISUAL SEARCH

Klaus Schoeffmann, David Ahlström, Laszlo Böszörményi

Track: Multimedia Applications, Interface and Interaction

Session ID: PH1

Paper ID: 510

FROM TEXT DETECTION IN VIDEOS TO PERSON IDENTIFICATION

Johann Poignant, Laurent Besacier, Georges Qu'enot, Franck Thollard

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 749

LEVERAGING CONCEPT ASSOCIATION NETWORK FOR MULTIMEDIA RARE CONCEPT MINING AND RETRIEVAL

Tao Meng, Mei-Ling Shyu

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 608

LARGE SCALE PARTIAL-DUPLICATE IMAGE RETRIEVAL USING INVARIANCE WEIGHT OF SIFT AND SROA GEOMETRIC CONSISTENCY

Zhi Li, Guizhong Liu, Yana Ma

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH1

Paper ID: 645

WHO'S WHO IN A SPORTS VIDEO? AN INDIVIDUAL LEVEL SPORTS VIDEO INDEXING SYSTEM

Shih-Wei Sun, Wen-Huang Cheng, Yao-Ling Hung, Ivy Fan, Chris Liu, Jacqueline Hung, Chia-Kai Ling and Hong-Yuan Mark Liao

Track: Multimedia Applications, Interface and Interaction

Session ID: PH1

Paper ID: 788

OBJECT DETECTION BASED ON CO-OCCURRENCE GMULBP FEATURES

Jingsong Xu, Qiang Wu, Jian Zhang, Zhenmin Tang

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 286

LIVE SEMANTIC SPORT HIGHLIGHT DETECTION BASED ON
ANALYZING TWEETS OF TWITTER

Liang-Chi Hsieh, Ching-Wei Lee, Tzu-Hsuan Chiu, Winston Hsu

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 399

IMPROVING RELEVANCE FEEDBACK FOR IMAGE RETRIEVAL WITH
ASYMMETRIC SAMPLING

Biao Niu, Jian Cheng, Hanqing Lu

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 406

CONTENTED-BASED LARGE SCALE WEB AUDIO COPY DETECTION

Lezi Wang*, BUPT; Dong Yuan, ; hongliang bai, France Telecom
research & development - Beijing; chong huang, bupt

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 511

EFFICIENT LEVEL OF SERVICE CLASSIFICATION FOR TRAFFIC
MONITORING IN THE COMPRESSED VIDEO DOMAIN

Roland Tusch, Felix Pletzer, Armin Krätschmer, Laszlo Böszörményi,
Bernhard Rinner, Thomas Mariacher, Manfred Harrer

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 679

A LOCAL TEMPORAL CONTEXT-BASED APPROACH FOR TV NEWS
STORY SEGMENTATION

Émilie Dumont, Georges Quénot

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 121

EVALUATING GAUSSIAN LIKE IMAGE REPRESENTATIONS OVER
LOCAL FEATURES

Yu-Chuan Su, Guan-Long Wu, Tzu-Hsuan Chiu, Winston H. Hsu, Kuo-
Wei Chang

Track: Multimedia Content Analysis, Retrieval and Databases
Session ID: PH1

Paper ID: 149

A SYNAESTHETIC APPROACH FOR IMAGE SLIDESHOW GENERATION

Xiang Yangyang, Mohan S. Kankanhalli

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PH1

PH2

Chairs: Jeroen Vondrig, Canon Information Systems Research
Australia (CiSRA)

Time: 16:00-17:30, 12th July 2012

Room: 103

Paper ID: 287

GPU AND CPU COOPERATIVE ACCELERATION FOR FACE DETECTION
ON MODERN PROCESSORS

Eric Li, Bin Wang, Liu Yang, Ya-ti Peng, Yangzhou Du, Yimin Zhang,
Yi-Jen Chiu

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 203

AREA AND MEMORY EFFICIENT ARCHITECTURES FOR 3D BLU-RAY-
COMPLIANT MULTIMEDIA PROCESSORS

Chi-Cheng Ju, Tsu-Ming Liu, Yeh-Lin Chu, Chuang-Chi Chiou, Bin-
Jung Tsai, Te-Chi Hsiao, Ginny Chen, Pin-Huan Hsu, Chih-Ming Wang,
Chun-Chia Chen, Hue-Min Lin, Chia-Yun Cheng, Min-Hao Chiu,
Sheng-Jen Wang, Jiun-Yuan Wu, Yuan-Chun Lin, Yung-Chang Chang,
Chu

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 342

ENERGY-AWARE OPERATION OF BLACK BOX SURVEILLANCE
CAMERAS UNDER EVENT UNCERTAINTY AND MEMORY
CONSTRAINT

Giwon Kim, Jungsoo Kim, Jongpil Jung, Chong-Min Kyung

Track: Multimedia Security and Privacy

Session ID: PH2

Paper ID: 626

A UNIFIED 4/8/16/32-POINT INTEGER IDCT ARCHITECTURE FOR
MULTIPLE VIDEO CODING STANDARDS

Sha Shen, Weiwei Shen, Yibo Fan, Xiaoyang Zeng

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH2

Paper ID: 548

A NOVEL PROGRESSIVE IMAGE SCANNING AND RECONSTRUCTION
SCHEME BASED ON COMPRESSED SENSING AND LINEAR
PREDICTION

Giulio Coluccia, Enrico Magli

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 379

GRAPH-BASED SEQUENTIAL PARTICLE FILTERING FRAMEWORK FOR ARTICULATED MOTION ANALYSIS

Jing Huang and Dan Schonfeld

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 474

A NOVEL VIEW-LEVEL TARGET BIT RATE DISTRIBUTION ESTIMATION TECHNIQUE FOR REAL-TIME MULTI-VIEW VIDEO PLUS DEPTH

Mario Cordina, Carl J. Debono

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 506

COMBINED INTER-FRAME AND INTER-COLOR PREDICTION FOR COLOR VIDEO DENOISING

Jingjing Dai, Oscar C. Au, Chao Pang and Feng Zou

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 233

DUAL-TRANSFORM BASED NOISE ESTIMATION

Chongwu Tang, Xiaokang Yang and Guangtao Zhai

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 354

PARALLELIZATION DESIGN OF IRREGULAR ALGORITHMS OF VIDEO PROCESSING ON GPUS

Huayou Su, Jun Chai, Mei Wen, Ju Ren, Chunyuan Zhang

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 652

MEASUREMENT OF HUMAN SENSITIVITY ACROSS THE VERTICAL-TEMPORAL VIDEO SPECTRUM FOR INTERLACING FILTER SPECIFICATION

Katy Noland

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 678

SAMPLING TECHNIQUE ANALYSIS OF NYSTROM APPROXIMATION IN PIXEL-WISE AFFINITY MATRIX

Chieh-Chi Kao, Jui-Hsin Lai, Ja-Ling Wu, Shao-Yi Chien

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 199

FAST VIDEO STABILIZATION IN THE COMPRESSED DOMAIN

Manish Okade, P. K. Biswas

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 604

NOVEL BINAURAL SPECTRO-TEMPORAL ALGORITHM FOR SPEECH
ENHANCEMENT IN LOW SNR ENVIRONMENTS

Po-Hsun Sung, Bo-Wei Cheng, Ling-Sheng Jang and Jhing-Fa Wang

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 405

DISCOVERING THE BEST FEATURE EXTRACTION AND SELECTION
ALGORITHMS FOR SPONTANEOUS FACIAL EXPRESSION
RECOGNITION

Ligang Zhang, Dian Tjondronegoro and Vinod Chandran

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 326

SALIENT OBJECT DETECTION THROUGH OVER-SEGMENTATION

Xuejie Zhang, Zhixiang Ren, Deepu Rajan, Yiqun Hu

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 513

EEG-BASED DOMINANCE LEVEL RECOGNITION FOR EMOTION-
ENABLED INTERACTION

Yisi Liu, Olga Sourina

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

Paper ID: 430

IMAGE SUPER-RESOLUTION VIA LOW-PASS FILTER BASED MULTI-
SCALE IMAGE DECOMPOSITION

Shuyuan Zhu, Bing Zeng, Shuicheng Yan

Track: Multimedia Signal Processing, System and Architect

Session ID: PH2

PH3

Time: 16:00-17:30, 12th July 2012

Chairs: Ruiqin Xiong, Peking University, China

Room: 104

Paper ID: 427

LIPS: A LIGHTWEIGHT INTER-LAYER PROTECTION SCHEME FOR SCALABLE VIDEO CODING

Shih-Ying Chang, Hsin-Ta Chiao

Track: Multimedia Networking and Communications

Session ID: PH3

Paper ID: 196

EFFECTIVE SPATIAL DATA BROADCASTING

Chung-Hua Chu

Track: Multimedia Networking and Communications

Session ID: PH3

Paper ID: 550

PRIME: PRE-REGISTRATION FOR IMS MOBILITY ENHANCEMENT

Abolfazl Nazari, Jason But, Philip Branch, Hai Vu

Track: Multimedia Networking and Communications

Session ID: PH3

Paper ID: 716

COMPLEXITY MODELING OF THE MOTION COMPENSATION PROCESS OF THE H.264/AVC VIDEO CODING STANDARD

Mehdi Semsarzadeh, Mohsen Jamali Langroodi, Mahmoud Reza Hashemi, Shervin Shirmohammadi

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 505

FINE-GRANULAR PARALLEL EBCOT AND OPTIMIZATION WITH CUDA FOR DIGITAL CINEMA IMAGE COMPRESSION

Fang Wei, Qiu Cui, Ye Li

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 527

AN OPTIMIZED HARDWARE VIDEO ENCODER FOR AVS WITH LEVEL C+ DATA REUSE SCHEME FOR MOTION ESTIMATION

Kaijin Wei, Rongwei Zhou, Shanghang Zhang, Huizhu Jia, Don Xie, and Wen Gao

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 555

MOTION BASED PERCEPTUAL DISTORTION AND RATE
OPTIMIZATION FOR VIDEO CODING

Xi Wang, Li Su, Qingming Huang, Chunxi Liu, Ling-Yu Duan

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 311

MACRO-BLOCK-LEVEL SELECTIVE BACKGROUND DIFFERENCE

Xianguo Zhang, Yonghong Tian, Luhong Liang, Tiejun Huang, Wen
Gao

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 544

A TWO-PIECE R-D MODEL FOR HYBRID VIDEO CODING AND ITS
APPLICATION IN FAST MODE DECISION

Alireza Aminlou, Hana Fahim-Hashemi, Mahmoud Reza Hashemi,
Moncef Gabbouj, Omid Fatemi

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 683

SPREAD AND ITERATIVE SEARCH: A HIGH QUALITY MOTION
ESTIMATION ALGORITHM FOR HIGH DEFINITION VIDEOS AND ITS
VLSI DESIGN

Gustavo Sanchez, Luciano Agostini, Felipe Sampaio, Marcelo Porto,
Sergio Bampi

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 773

A LOW-COMPLEXITY HEVC INTRA PREDICTION ALGORITHM BASED
ON LEVEL AND MODE FILTERING

Heming Sun, Dajiang Zhou and Satoshi Goto

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

Paper ID: 723

SPATIALLY SCALABLE VIDEO CODING FOR HEVC

Zhongbo Shi, Xiaoyan Sun, Feng Wu

Track: Multimedia Coding, Transcoding and Standards

Session ID: PH3

PH4

Chairs: JingjingFu, MSRA, China

Time: 16:00-17:30, 12th July 2012

Room: 104

Paper ID: 537

3D HEAD POSE ESTIMATION BASED ON SCENE FLOW AND GENERIC HEAD MODEL

Peng Liu, Michael Reale, Lijun Yin

Track: Multimedia Applications, Interface and Interaction

Session ID: PH4

Paper ID: 328

EFFICIENT SUPER-RESOLUTION BY FINER SUB-PIXEL MOTION PREDICTION AND BILATERAL FILTERING

Damith J. Mudugamuwa, Xiangjian He, Wenjing Jia

Track: Multimedia Signal Processing, System and Architect

Session ID: PH4

Paper ID: 285

AUTOMATIC VIDEO EDITING FOR VIDEO-BASED INTERACTIVE STORYTELLING

Edirlei Soares de Lima, Bruno Feijó, Cesar Pozzer, Angelo Ciarlini, Antonio Furtado

Track: Multimedia Content Analysis, Retrieval and Databases

Session ID: PH4

Paper ID: 759

CROWDSOURCED LEARNING TO PHOTOGRAPH VIA MOBILE DEVICES

Wenyuan Yin, Tao Mei, Chang Wen Chen

Track: Multimedia Applications, Interface and Interaction

Session ID: PH4

Paper ID: 319

PAUSE INTENSITY: A NO-REFERENCE QUALITY ASSESSMENT METRIC FOR VIDEO STREAMING IN TCP NETWORKS

Colin Bailey, Mirghiasaldin Seyedebrahimi, Xiao-Hong Peng

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PH4

Paper ID: 158

VISUAL CONTRAST SENSITIVITY GUIDED VIDEO QUALITY ASSESSMENT

Junyong You, Liyuan Xing, Andrew Perkis, Touradj Ebrahimi

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PH4

Paper ID: 248

GAUSSIAN NOISE LEVEL ESTIMATION IN SVD DOMAIN FOR IMAGES

Wei Liu, Weisi Lin

Track: Multimedia Quality Assessment and Quality Experien

Session ID: PH4

Paper ID: 672

REDUCING BLOCKING ARTIFACTS IN COMPRESSED IMAGES VIA
TRANSFORM-DOMAIN NON-LOCAL COEFFICIENTS ESTIMATION

Xinfeng Zhang, Ruiqin Xiong, Siwei Ma, Wen Gao

Track: Multimedia Signal Processing, System and Architect

Session ID: PH4

Paper ID: 466

AN AUGMENTED REALITY 3D POP-UP BOOK: THE DEVELOPMENT OF
A MULTIMEDIA PROJECT FOR ENGLISH LANGUAGE TEACHING

Poonsri Vate-U-Lan

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PH4

Paper ID: 267

A NOVEL FRAMEWORK FOR 3D COMPUTER ANIMATION SYSTEMS
FOR NONPROFESSIONAL USERS USING AN AUTOMATIC RIGGING
ALGORITHM

Natapon Pantuwong and Masanori Sugimoto

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PH4

Paper ID: 124

UNSUPERVISED CONVERSION OF 3D MODELS FOR INTERACTIVE
METAVERSES

Jeff Terrace, Ewen Cheslack-Postava, Philip Levis, and Michael J.
Freedman

Track: Multimedia Creation and Synthesis and 3D Media

Session ID: PH4

WORKSHOPS PROGRAM

MUST-EH: The 2nd IEEE International Workshop on Multimedia Services and Technologies for E-health

Chairs: M. Shamim Hossain, King Saud University, KSA
Stefan Goebel, KOM, TU Darmstadt, Germany

Opening

Time: 8:30 - 8:40, 9th July 2012

Room: 101

WM1

Time: 8:40 - 10:20, 9th July 2012

Room: 101

Paper IDW58

A NEW TEXTURE FEATURE FOR IMPROVED FOOD RECOGNITION
ACCURACY IN A MOBILE PHONE BASED DIETARY ASSESSMENT
SYSTEM

Md Hafizur Rahman, M. R Pickering, D. Kerr, C. J. Bousheyc, E. J. Delp

*Session: WM1, The 2nd IEEE International Workshop on Multimedia
Services and Technologies for E-health*

Paper IDW180

SPECULAR HIGHLIGHT REMOVAL FOR IMAGE-BASED DIETARY
ASSESSMENT

Y. He, N. Khanna, C.J. Boushey, E.J. Delp

*Session: WM1, The 2nd IEEE International Workshop on Multimedia
Services and Technologies for E-health*

Morning Tea

Time: 10:20-10:50

WM4

Time: 10:50 - 12:30, 9th July 2012

Room: 101

Paper IDW3

A REAL-TIME BIOFEEDBACK HEALTH ADVISORY SYSTEM FOR
CHILDREN CARE

Hawazin Badawi, Mohamad Eid, Abdulmotaleb El Saddik

*Session: WM4, The 2nd IEEE International Workshop on Multimedia
Services and Technologies for E-health*

Paper IDW178

A HUMAN CAREGIVER SUPPORT SYSTEM IN ELDERLY MONITORING FACILITY

M. Anwar Hossain and Dewan Tanvir Ahmed

Session: WM4, The 2nd IEEE International Workshop on Multimedia Services and Technologies for E-health

Paper IDW168

TELE-MEDICAL APPLICATIONS IN HOME-BASED HEALTH CARE

Reem Al-Attas, Abdulsalam Yassine, Shervin Shirmohammadi

Session: WM4, The 2nd IEEE International Workshop on Multimedia Services and Technologies for E-health

Paper IDW196

CLOUD-BASED E-HEALTH MULTIMEDIA FRAMEWORK FOR HETEROGENEOUS NETWORK

Atif Alamri

Session: WM4, The 2nd IEEE International Workshop on Multimedia Services and Technologies for E-health

Lunch

Time: 12:30-13:30

SMC: The 1st International Workshop on Social Multimedia Computing

Chairs: Gao Wen, Peking University, China

Zhou Wanlei, Deakin University, Australia

Opening

Time: 8:30 - 8:40, 9th July 2012

Room: 103

WM2

Time: 8:40-10:20, 9th July 2012

Room: 103

Paper IDW15

SOCIAL PHOTO TAGGING RECOMMENDATION USING COMMUNITY-BASED GROUP ASSOCIATIONS

Chien-Li Chou, Yee-Choy Chean, Yi-Cheng Chen, Hua-Tsung Chen and Suh-Yin Lee

Session: WM2, The 1st International Workshop on Social Multimedia Computing

Paper IDW11

SOCIAL ATTRIBUTE ANNOTATION FOR PERSONAL PHOTO COLLECTION

Zhipeng Wu, Kiyoharu Aizawa

Session: WM2, The 1st International Workshop on Social Multimedia Computing

Morning Tea

Time: 10:20-10:50

WM5

Time: 10:50 - 12:30, 9th July 2012

Room: 103

Paper IDW47

AUTOMATIC SOCIAL NETWORK CONSTRUCTION FROM MOVIES USING FILM-EDITING CUES

Mei-Chen Yeh, Ming-Chi Tseng, Wen-Po Wu

Session: WM5, The 1st International Workshop on Social Multimedia Computing

Paper IDW123

EXTRACTING CONTEXT INFORMATION FROM MICROBLOG BASED ON ANALYSIS OF ONLINE REVIEWS

Takumi Takehara, Shohei Miki, Naoko Nitta and Noboru Babaguchi

Session: WM5, The 1st International Workshop on Social Multimedia Computing

Paper IDW22

HOW MULTIMEDIA IN ENTERPRISE SOCIAL NETWORKS MATTERS TO PEOPLE'S PERFORMANCE

Zhen Wen, Mercan Topkara, Liangliang Cao, Ching-Yung Lin, Jennifer Lai

Session: WM5, The 1st International Workshop on Social Multimedia Computing

Paper IDW41

MEMETIC COMMUNICATION MEDIA - CONCEPTS, TECHNOLOGIES, APPLICATIONS

Klaus P. Jantke, Jun Fujima, Oksana Arnold, André Schulz

Session: WM5, The 1st International Workshop on Social Multimedia Computing

Paper IDW172

A MODEL DRIVEN APPROACH FOR INTEGRATION OF INTERACTIVE APPLICATIONS AND WEB SERVICES: A CASE STUDY IN INTERACTIVE DIGITAL TV PLATFORM

Raoni Kulesza, Silvio R. L. Meira, Thales P. Ferreira, Eduardo S. M. Alexandre, Guido L. S. Filho, Manoel C Marques Neto Celso A. S. Santos

Session: WM5, The 1st International Workshop on Social Multimedia Computing

Lunch

Time: 12:30-13:30

WM8

Time: 13:30 - 15:10, 9th July 2012

Room: 103

Paper IDW158

VISUALIZATION OF REAL-WORLD EVENTS WITH GEOTAGGED TWEET PHOTOS

Yusuke Nakaji and Keiji Yanai

Session: WM8, The 1st International Workshop on Social Multimedia Computing

Paper IDW40

MULTISCALE BROWSING THROUGH VIDEO COLLECTIONS IN SMARTPHONES USING SCALABLE STORYBOARDS

Luis Herranz

Session: WM8, The 1st International Workshop on Social Multimedia Computing

Paper IDW32

RANDOM SUBSPACE METHOD FOR GAIT RECOGNITION

Yu Guan, Chang-Tsun Li and Yongjian Hu

Session: WM8, The 1st International Workshop on Social Multimedia Computing

Paper IDW102

HOW MANY FRAMES DOES FACIAL EXPRESSION RECOGNITION REQUIRE?

Kaimin Yu, Zhiyong Wang, Genliang Guan, Qiuxia Wu, Zheru Chi and Dagan Feng

Session: WM8, The 1st International Workshop on Social Multimedia Computing

Paper IDW18

THE PERFORMANCE OF THE SPEAKING RATE PARAMETER IN EMOTION RECOGNITION FROM SPEECH

David Philippou-Hübner, Bogdan Vlasenko, Ronald Böck, Andreas Wendemuth

Session: WM8, The 1st International Workshop on Social Multimedia Computing

Afternoon Tea

Time: 15:10-15:40

WM11

Time: 15:40 - 17:50, 9th July 2012

Room: 103

Paper IDW8

QUERY BY HUMMING BY USING LOCALITY SENSITIVE HASHING BASED ON COMBINATION OF PITCH AND NOTE

Qiang Wang, Zhiyuan Guo, Gang Liu, Jun Guo, Yueming Lu

Session: WM11, The 1st International Workshop on Social Multimedia Computing

Paper IDW122

PHOTO LAYOUT WITH A FAST EVALUATION METHOD AND GENETIC ALGORITHM

Jian Fan

Session: WM11, The 1st International Workshop on Social Multimedia Computing

Paper IDW7

ROI-BASED VIDEO STABILIZATION ALGORITHM FOR HAND-HELD CAMERAS

Dong-bok Lee, Ick-hyun Choi, Byung Cheol Song, Tae Hwan Lee

Session: WM11, The 1st International Workshop on Social Multimedia Computing

Paper IDW68

CONTEXTUAL DOMINANT COLOR NAME EXTRACTION FOR WEB IMAGE SEARCH

Peng Wang, Dongqing Zhang, Gang Zeng and Jingdong Wang

Session: WM11, The 1st International Workshop on Social Multimedia Computing

Paper IDW181

DISTRIBUTED VIDEO CODING BASED ON COMPRESSED SENSING

Yousuf Baig, Edmund M-K. Lai and Amal Punchihewa

Session: WM11, The 1st International Workshop on Social Multimedia Computing

HotMM: Workshop on Hot Topics in Mobile Multimedia

Chairs: Sanjeev Mehrotra, Microsoft Research, Redmond
Suman Banarjee, University of Wisconsin, Madison
Yan Lu, Microsoft Research Asia, Beijing
Shipeng Li, Microsoft Research Asia, Beijing

Opening

Time: 8:30 - 8:40, 9th July 2012

Room: 104

WM3

Time: 8:40 - 10:20, 9th July 2012

Room: 104

Paper IDW166

MOBILE TV WITH LONG TIME INTERLEAVING AND FAST ZAPPING

Cornelius Hellge, Valentina Pullano, Manuel Hensel, Giovanni E. Corazza, Thomas Schierl and Thomas Wiegand

Session: WM3, Workshop on Hot Topics in Mobile Multimedia

Paper IDW185

FRAGMENT REDUCTION ON MOBILE GPU WITH CONTENT ADAPTIVE SAMPLING

Chia-Yang Chang, Yu-Jung Chen, Chia-Ming Chang, Shao-Yi Chien

Session: WM3, Workshop on Hot Topics in Mobile Multimedia

Morning Tea

Time: 10:20-10:50

WM6

Time: 10:50 - 12:30, 9th July 2012

Room: 104

Paper IDW162

BI-MODAL PERSON RECOGNITION ON A MOBILE PHONE: USING MOBILE PHONE DATA

Chris McCool, Sébastien Marcel, Abdenour Hadid, Matti Pietikäinen, Pavel Matějka, Jan Cernocky, Norman Poh, Josef Kittler, Anthony Larcher, Christophe Lévy, Driss Matrouf, Jean-François Bonastre, Phil Tresadernk and Timothy Cootes

Session: WM6, Workshop on Hot Topics in Mobile Multimedia

Paper IDW53

EMPLOYING 3D ACCELEROMETER INFORMATION FOR FAST AND RELIABLE IMAGE FEATURES MATCHING ON MOBILE DEVICES

Ayman Kaheel, Motaz El-Saban, Mostafa Izz and Mahmoud Refaat

Session: WM6, Workshop on Hot Topics in Mobile Multimedia

Paper IDW83

THEORETICAL FRAMEWORK FOR EVALUATING PARTIAL CHECKSUM PROTECTION IN WIRELESS VIDEO STREAMING

Jari Korhonen, Søren Forchhammer, and Knud J. Larsen

Session: WM6, Workshop on Hot Topics in Mobile Multimedia

Paper IDW175

REAL TIME DYNAMIC IMAGE RE-TARGETING BASED ON A DYNAMIC VISUAL ATTENTION MODEL

Matthieu Perreira Da Silva , Vincent Courboulayy and Patrick Le Callet

Session: WM6, Workshop on Hot Topics in Mobile Multimedia

Paper IDW91

INSPORAMA: INS-AIDED MISALIGNMENT CORRECTION IN FEATURE-BASED PANORAMIC IMAGE STITCHING

Yuan Gao, Chengu Wang, Edward Y. Chang

Session: WM6, Workshop on Hot Topics in Mobile Multimedia

Lunch

Time: 12:30-13:30

3DCIA: The 2nd Workshop on Community Based 3D Contents and Its Application

Chairs: Yihong Wu, Institute of Automation, Chinese Academy of Sciences, China

Peter Sturm, INRIA, France

Lixin Fan, Nokia Research Center, Finland

Jian Zhang, University of Technology, Sydney, Australia,
NICTA (National ICT Australia)

Opening

Time: 13:30 - 13:40, 9th July 2012

Room: 101

WM7

Time: 13:30 - 15:10, 9th July 2012

Room: 101

Paper IDW116

ROUTE VISUALIZATION IN INDOOR PANORAMIC IMAGERY WITH
OPEN AREA MAPS

Matei Stroila, Adil Yalcin, Joe Mays and Narayanan Alwar

*Session: WM7, The 2nd Workshop on Community Based 3D Contents
and Its Application*

Paper IDW42

DEPTH EXTRACTION FROM MONOCULAR VIDEO USING
BIDIRECTIONAL ENERGY MINIMIZATION AND INITIAL DEPTH
SEGMENTATION

Chunyu lin, Jan De Cock, Jürgen Slowack, Peter Lambert and Rik Van
de Walle

*Session: WM7, The 2nd Workshop on Community Based 3D Contents
and Its Application*

Afternoon Tea

Time: 15:10-15:40

WM10

Time: 15:40 - 17:20, 9th July 2012

Room: 101

Paper IDW71

DEPTH AND GEOMETRY FROM A SINGLE 2D IMAGE USING
TRIANGULATION

Yasir Salih and Aamir S. Malik

*Session: WM10, The 2nd Workshop on Community Based 3D
Contents and Its Application*

Paper IDW20

AN IMPROVED BUILDING DETECTION TECHNIQUE FOR COMPLEX SCENES

Mohammad Awrangjeb, Chunsun Zhang, Clive S. Fraser

Session: WM10, The 2nd Workshop on Community Based 3D Contents and Its Application

Paper IDW50

3D POSE ESTIMATION OF FRONT VEHICLE TOWARDS A BETTER DRIVER ASSISTANCE SYSTEM

Yu Peng, Jesse S. Jin, Suhuai Luo, Min Xu, Yue Cui

Session: WM10, The 2nd Workshop on Community Based 3D Contents and Its Application

Paper IDW160

INTER PREDICTION BASED ON LOW-RANK MATRIX COMPLETION

Yunhui Shi, He Li, Jin Wang, Wenpeng Ding, Baocai Yin

Session: WM10, The 2nd Workshop on Community Based 3D Contents and Its Application

Paper IDW141

A NOVEL EDGE DETECTION FRAMEWORK BY COMPONENT TREE CONSTRUCTION

Zhijun Dai, YihongWu, Youji Feng

Session: WM10, The 2nd Workshop on Community Based 3D Contents and Its Application

Best Paper Discussion

Time: 17:20 - 17:50, 9th July 2012

TEMPEKU: Tangible Edutainment Media for Playful Evolution of Knowledge and Understanding

Chairs: Jun Fujima, Fraunhofer IDMT, Germany

Klaus P. Jantke, Fraunhofer IDMT, Ilmenau & Erfurt,
Germany

Yuzuru Tanaka, Hokkaido University Sapporo, Japan

Nigel Waters, George Mason University, Fairfax, VA, USA

Opening

Time: 13:30 - 13:40, 9th July 2012

Room: 104

WM9

Time: 13:30 - 15:10, 9th July 2012

Room: 104

Paper IDW92

JOB SHOP SCHEDULING AT YOUR FINGERTIPS & PLANNING
ALTERNATIVES OFF THE CLOUD

Christoph Vogler, Hans-Rainer Beick, Jan Opfermann, Wolfgang
Hölzer

*Session: WM9, Tangible Edutainment Media for Playful Evolution of
Knowledge and Understanding*

Paper IDW140

OVIE: OBJECT ORIENTED AND VECTOR BASED IMAGE EDITING

Hailing Zhou, Jianmin Zheng

*Session: WM9, Tangible Edutainment Media for Playful Evolution of
Knowledge and Understanding*

Paper IDW87

REAL-TIME POLYPHONIC SCORE FOLLOWING SYSTEM

Ting-Ting Chou Wen-Chieh Chen Siang-An Wnag Ken-Ning Chang
Herng-Yow Chen

*Session: WM9, Tangible Edutainment Media for Playful Evolution of
Knowledge and Understanding*

Afternoon Tea

Time: 15:10-15:40

WM12

Time: 15:40 - 17:50, 9th July 2012

Room: 104

Paper IDW132

ADVANCED WEBBLE APPLICATION DEVELOPMENT DIRECTLY IN THE BROWSER BY UTILIZING THE FULL POWER OF MEME MEDIA CUSTOMIZATION AND EVENT MANAGEMENT CAPABILITIES

Micke Kuwahara, Yuzuru Tanaka

Session: WM12, Tangible Edutainment Media for Playful Evolution of Knowledge and Understanding

Paper IDW6

MEDIA MULTIPLICITY AT YOUR FINGERTIPS: DIRECT MANIPULATION BASED ON WEBBLES

Jun Fujima, Klaus P. Jantke, Oksana Arnold

Session: WM12, Tangible Edutainment Media for Playful Evolution of Knowledge and Understanding

Paper IDW139

IMPROVISATIONAL CONSTRUCTION OF A CONTEXT FOR DYNAMIC IMPLEMENTATION OF ARBITRARY SMART OBJECT FEDERATION SCENARIOS

Jérémie Julia, Yuzuru Tanaka

Session: WM12, Tangible Edutainment Media for Playful Evolution of Knowledge and Understanding

EMSA: International Workshop on Emerging Multimedia Systems and Applications

Chairs: Zhenzhong Chen, MediaTek USA Inc., USA

Wenjun Zeng, University of Missouri, USA

Patrick Le Callet, Polytech'Nantes, France

Opening

Time: 8:30 - 8:40, 13th July 2012

Room: 103

WF1

Time: 8:40 - 10:20, 13th July 2012

Room: 103

Paper IDW98

ADOPTING PERCEPTUAL QUALITY METRICS IN VIDEO ENCODERS:
PROGRESS AND CRITIQUES

Po-Yen Su, Chieh-Kai Kao, Tsung-Yau Huang and Homer H. Chen

Session: WF1, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW30

VIDEO CONTENT DEPENDENT DIRECTIONAL TRANSFORM FOR HIGH
PERFORMANCE VIDEO CODING

Long Xu, King Nghi Ngan

Session: WF1, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW81

NOVEL 3DV CODING SCHEME WITH DOWN-/UP-SAMPLING AND
ASYMMETRICAL PREDICTION

Xiang Ma, Junyan Huo, Yilin Chang, Guangliang Ren, Ying Chen, Li Zhang

Session: WF1, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW148

UNIDIRECTIONAL ENCODER RATE CONTROL SCHEME FOR
TRANSFORM DOMAIN DISTRIBUTED VIDEO CODING

Vijay Kumar, Somnath Sengupta

Session: WF1, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW195

AN OVERVIEW OF PERCEPTUAL PROCESSING FOR DIGITAL PICTURES

Hong Ren Wu, Weisi Lin and Lina J. Karam

Session: WF1, International Workshop on Emerging Multimedia Systems and Applications

Morning Tea

Time: 10:20-10:50

WF7

Time: 10:50 - 12:30, 13th July 2012

Room: 103

Paper IDW43

CROSS-LAYER OPTIMIZED CODING MODE SELECTION FOR WIRELESS VIDEO COMMUNICATIONS

Yun Ye, Song Ci, Dalei Wu

Session: WF7, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW48

MINIMIZING VIDEO RETRANSMISSION DELAY AND ENERGY CONSUMPTION WITH CACHING ROUTERS

Michael P. McGarry, Jesus Hernandez, Rony Ferzli and Violet R. Syrotiuk

Session: WF7, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW124

DISTRIBUTED AREA OF INTEREST MANAGEMENT FOR LARGE-SCALE IMMERSIVE VIDEO CONFERENCING

Pedram Pourashraf, Farzad Safaei, Daniel R. Franklin

Session: WF7, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW170

SEAMLESS VIDEO STREAMING: A LIGHT WEIGHT SESSION HANDOFF SCHEME FOR DYNAMIC STREAM MERGING BASED WIRELESS MESH NETWORKS

Vaithiyanathan Sundaram, Kien A. Hua

Session: WF7, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW35

CONTENT-BASED IMAGE RETRIEVAL IN P2P NETWORKS WITH BAG-OF-FEATURES

Lelin Zhang, Zhiyong Wang, Dagan Feng

Session: WF7, International Workshop on Emerging Multimedia Systems and Applications

Lunch

Time: 12:30-13:30

WF13

Time: 13:30 - 15:10, 13th July 2012

Room: 103

Paper IDW31

MAGIC INPUT: A MULTI-USER INTERACTION SYSTEM FOR SAGE BASED LARGE TILED-DISPLAY ENVIRONMENT

Yihua Lou, Wenjun Wu, Hui Zhang

Session: WF13, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW45

INFRARED AND INTERTIAL TRACKING IN THE IMMERSIVE AUDIO ENVIRONMENT FOR ENHANCED MILITARY TRAINING

Pratik Shah, Ayman Faza, Raghavendra Nimmala, Steven Grant, William Chapin and Robert Montgomery

Session: WF13, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW60

REAL-TIME PITCH TRAINING SYSTEM FOR VIOLIN LEARNERS

Jian-Heng Wang Siang-An Wang Wen-Chieh Chen Ken-Ning Chang Heng-Yow Chen

Session: WF13, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW177

VIRTUAL INTERACTIONS: CAN EEG HELP MAKE THE DIFFERENCE WITH REAL INTERACTION?

Jan Rzepecki, Jonathan Delcourt, Matthieu Perreira Da Silva, Patrick Le Callet

Session: WF13, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW202

A RULE-BASED VIRTUAL DIRECTOR ENHANCING GROUP COMMUNICATION

Rene Kaiser, Wolfgang Weiss, Manolis Falelakis, Spiros Michalakopoulos and Marian F. Ursu

Session: WF13, International Workshop on Emerging Multimedia Systems and Applications

Afternoon Tea

Time: 15:10-15:40

WF19

Time: 15:40 - 17:00, 13th July 2012

Room: 103

Paper IDW2

LAYOUT-EXPECTATION-BASED MODEL FOR IMAGE SEARCH RE-RANKING

Bin Jin, Wei Yao Lin, Jianxin Wu, Tianhao Wu, Jun Huang, Chongyang Zhang

Session: WF19, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW16

TOWARDS A VIDEO BROWSER FOR THE DIGITAL NATIVE

Brett Adams, Stewart Greenhill, Svetha Venkatesh

Session: WF19, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW17

TRAFFIC CONGESTION CLASSIFICATION FOR NIGHTTIME SURVEILLANCE VIDEOS

Hua-Tsung Chen, Li-Wu Tsai, Hui-Zhen Gu, Suh-Yin Lee, Bao-Shuh P. Lin

Session: WF19, International Workshop on Emerging Multimedia Systems and Applications

Paper IDW25

CROSS-LAYERED HIDDEN MARKOV MODELING FOR SURVEILLANCE EVENT RECOGNITION

Chongyang Zhang, Jingbang Qiu, Shibao Zheng, Xiaokang Yang

Session: WF19, International Workshop on Emerging Multimedia Systems and Applications

Break

Time: 17:00-17:10

WF25

Time: 17:10 - 18:30, 13th July 2012

Room: 103

Paper IDW163

IMPROVED IMAGE RETARGETING BY DISTINGUISHING BETWEEN FACES IN FOCUS AND OUT OF FOCUS

Johannes Kiess, Rodrigo Garcia, Stephan Kopf, Wolfgang Effelsberg

Session: WF25, International Workshop on Emerging Multimedia Systems and Applications

Hot3D: Workshop on Hot Topics in 3D Multimedia

Chairs: Amir Said, Hewlett-Packard Lab, Palo Alto, CA.
Andrew Perkis, Norwegian University of Science and
Technology, Norway
Antonio Ortega, University of Southern California, USA
Gene Cheung, National Institute of Informatics, Japan

Opening

Time: 8:30 - 8:40, 13th July 2012
Room: 101

WF2

Time: 8:40 - 10:20, 13th July 2012
Room: 101

Paper IDW44

AUTOMATIC QOE PREDICTION IN STEREOSCOPIC VIDEOS
Hossein Malekmohamadi, W. A. C. Fernando and A. M. Kondoz
Session: WF2, Workshop on Hot Topics in 3D Multimedia

Paper IDW52

A DENSE 3D RECONSTRUCTION APPROACH FROM UNCALIBRATED
VIDEO SEQUENCES
Li Ling, Ian S. Burnett, Eva Cheng
Session: WF2, Workshop on Hot Topics in 3D Multimedia

Morning Tea

Time: 10:20-10:50

WF8

Time: 10:50 - 12:30, 13th July 2012
Room: 101

Paper IDW106

NON-RIGID 3D MODEL RETRIEVAL USING SET OF LOCAL STATISTICAL
FEATURES
Yuki Ohkita, Yuya Ohishi, Takahiko Furuya, Ryutarou Ohbuchi
Session: WF8, Workshop on Hot Topics in 3D Multimedia

Paper IDW128

KINECT-LIKE DEPTH COMPRESSION WITH 2D+T PREDICTION
Jingjing Fu, Dan Miao, Weiren Yu, Shiqi Wang, Yan Lu, Shipeng Li
Session: WF8, Workshop on Hot Topics in 3D Multimedia

Paper IDW131

DEPTH MAP SUPER-RESOLUTION USING SYNTHESIZED VIEW
MATCHING FOR DEPTH-IMAGE-BASED RENDERING

Wei Hu, Gene Cheung, Xin Li, Oscar Au

Session: WF8, Workshop on Hot Topics in 3D Multimedia

Paper IDW157

IMPROVING DEPTH COMPRESSION IN HEVC BY PRE/POST
PROCESSING

Cuiling Lan, Jizheng Xu and Feng Wu

Session: WF8, Workshop on Hot Topics in 3D Multimedia

Paper IDW167

LOSSLESS COMPRESSION OF STEREO DISPARITY MAPS FOR 3D

Marco Zamarin, Søren Forchhammer

Session: WF8, Workshop on Hot Topics in 3D Multimedia

Lunch

Time: 12:30-13:30

CLCAT: The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gasteronomic Experiences

Chairs: Artur Lugmayr, Tampere University of Technology, Tampere, Finland

Jaz Hee-jeong Choi, Urban Informatics Research Lab, QUT, Brisbane, Australia

Kirralie Houghton, Queensland Univ. of Technology, Australia

Opening

Time: 8:30 - 8:40, 13th July 2012

Room: 102

WF3

CLCAT Keynote

Time: 8:40-10:20

Room: 102

Morning Tea

Time: 10:20-10:50

WF9

Time: 10:50 - 12:30, 13th July 2012

Room: 102

Paper IDW29

WEB-BASED AUGMENTED REALITY VIDEO STREAMING FOR MARKETING

Ville Valjus, Sari Järvinen, Johannes Peltola

Session: WF9, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gasteronomic Experiences

Paper IDW36

DISTRIBUTED AUGMENTED REALITY SYSTEMS: HOW MUCH PERFORMANCE IS ENOUGH?

Mehdi Chouiten, Jean-Yves Didier, Malik Mallem

Session: WF9, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gasteronomic Experiences

Paper IDW38

A MUSIC RETRIEVAL SYSTEM USING MELODY AND LYRIC

Zhiyuan Guo, Qiang Wang, Gang Liu, Jun Guo, Yueming Lu

Session: WF9, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gasteronomic Experiences

Paper IDW69

STATISTICAL COLOR MODEL BASED ADULT VIDEO FILTER

Liang Yin, Mingzhi Dong, Weihong Deng, Jun Guo, Bin Zhang

Session: WF9, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gastronomic Experiences

Lunch

Time: 12:30-13:30

WF15

Time: 13:30 - 15:10, 13th July 2012

Room: 102

Paper IDW117

LIVING THE PAST: AUGMENTED REALITY AND ARCHEOLOGY

Andrea Bernardini, Cristina Delogu, Emiliano Pallotti, Luca Costantini

Session: WF15, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gastronomic Experiences

Paper IDW194

RESEARCH DESIGN FOR EVALUATING HOW TO ENGAGE STUDENTS WITH URBAN PUBLIC SCREENS IN STUDENTS' NEIGHBOURHOODS

Artur Lugmayr, Yuan Fu

Session: WF15, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gastronomic Experiences

Paper IDW200

AMBIENT MEDIA FOR THE THIRD PLACE IN URBAN ENVIRONMENTS

Kiralie Houghton, Artur Lugmayr, Jaz Hee-jeong Choi

Session: WF15, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gastronomic Experiences

Paper IDW51

VIDEO DESCRIPTION LENGTH GUIDED CONSTANT QUALITY VIDEO CODING WITH BITRATE CONSTRAINT

Lei Yang, Debargha Mukherjee, Dapeng Wu

Session: WF15, The 1st Workshop on (Re)creating Lively Cities Through Ambient Technologies: Arts, Culture, and Gastronomic Experiences

A-LSMM: The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Chairs: Ling Shao, The University of Sheffield, UK
Jingdong Wang, Microsoft Research Asia, China
Zheng-Jun Zha, National University of Singapore, Singapore

Opening

Time: 8:30 - 8:40, 13th July 2012
Room: 111

WF4

Time: 8:40 - 10:20, 13th July 2012
Room: 111

Paper IDW28

TRIP MINING AND RECOMMENDATION FROM GEO-TAGGED PHOTOS
Huagang Yin, Changhu Wang, Nenghai Yu, Lei Zhang
Session: WF4, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Paper IDW61

A VISUAL SEARCH USER STUDY ON THE INFLUENCES OF ASPECT RATIO DISTORTION OF PREVIEW THUMBNAILS
David Ahlström, Klaus Schoeffmann
Session: WF4, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Morning Tea

Time: 10:20-10:50

WF10

Time: 10:50 - 12:30, 13th July 2012
Room: 111

Paper IDW183

A TEXTURAL BASED HIDDEN MARKOV MODEL FOR ANIMATION GENRE DISCRIMINATION
Joseph Santarcangelo, Xiao-Ping Zhang
Session: WF10, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Paper IDW76

FROM DOCUMENT TO IMAGE: LEARNING A SCALABLE RANKING MODEL FOR CONTENT BASED IMAGE RETRIEVAL

Chao Zhou, Yangxi Li, Bo Geng, Chao Xu

Session: WF10, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Paper IDW110

A NOVEL AUTOMATIC HIERACHICAL APPROACH TO MUSIC GENRE CLASSIFICATION

Hasitha B. Ariyaratne, Dengsheng Zhang

Session: WF10, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Paper IDW105

VIDEO SUMMARIZATION WITH GLOBAL AND LOCAL FEATURES

Genliang Guan, Zhiyong Wang, Kaimin Yu, Shaohui Mei, Mingyi He and Dagan Feng

Session: WF10, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Paper IDW63

AN IMPROVED PRUNING METHOD BASED ON THE NUMBER OF STATES POSSESSED BY HYPOTHESES

Junyao Shao, Gang Liu, Zhiyuan Guo, Baoxiang Li, Yueming Lu

Session: WF10, The International Workshop on Advances in Large-Scale Multimedia Data Collection, Mining and Retrieval

Lunch

Time: 12:30-15:30

HFC3D: Human-Focused Communications in the 3D Continuum

Chairs: Beatrice Pesquet-Popescu, Telecom-Paristech, France

Cha Zhang, Microsoft Research, USA

Jun Zhou, Australian National University, Australia

Opening

Time: 8:30 - 8:40, 13th July 2012

Room: 104

WF5

Time: 8:40 - 10:20, 13th July 2012

Room: 104

Paper IDW4

MULTIVIEW VIDEO CODING USING VIDEO GAME CONTEXT INFORMATION

Bart Pieters, Charles Hollemeersch, Jan De Cock, Peter Lambert, Rik Van de Walle, Patrice Rondao Alface, Christoph Stevens

Session: WF5, Human-Focused Communications in the 3D Continuum

Paper IDW23

CLASSIFICATION-BASED ADAPTIVE COMPRESSION METHOD FOR COMPUTER SCREEN IMAGE

Yanfei Shen, Jintao Li, Zhenmin Zhu, Yun Song

Session: WF5, Human-Focused Communications in the 3D Continuum

Morning Tea

Time: 10:20-10:50

WF11

Time: 10:50 - 12:30, 13th July 2012

Room: 104

Paper IDW85

A HYBRID CODED BLOCK PATTERNS BASED FAST MODE DECISION IN H.264/AVC

Zhiru Shi, W.A.C. Fernando and A.M. Kondoz

Session: WF11, Human-Focused Communications in the 3D Continuum

Paper IDW151

IMPROVING THE RATE-DISTORTION PERFORMANCE OF THE TRANSFORM DOMAIN REFINEMENT CODEC BY THE USE OF DECODER-DRIVEN ADAPTIVE MODES

Vijay Kumar, Somnath Sengupta

Session: WF11, Human-Focused Communications in the 3D Continuum

Paper IDW127

HIDDEN MARKOV MODEL FOR EVENT PHOTO STREAM SEGMENTATION

Jesse Prabawa Gozali, Min-Yen Kan, Hari Sundaram

Session: WF11, Human-Focused Communications in the 3D Continuum

Paper IDW173

USER REQUIREMENTS ELICITATION OF STEREOSCOPIC 3D VIDEO INTERACTION

Haiyue Yuan, Janko Calic, Anil Fernando, Ahmet Kondo

Session: WF11, Human-Focused Communications in the 3D Continuum

Paper IDW94

L-INFINITE CODING OF 3D REPRESENTATIONS OF HUMAN AFFECT
Ruxandra Florea, Leon Denis, Jan Lievens, Peter Schelkens, Adrian Munteanu

Session: WF11, Human-Focused Communications in the 3D Continuum

Lunch

Time: 12:30-13:30

WF17

Time: 13:30 - 15:10, 13th July 2012

Room: 104

Paper IDW126

SVD FILTER BASED MULTISCALE APPROACH FOR IMAGE QUALITY ASSESSMENT

Ashirbani Saha, Gaurav Bhatnagar and Q.M. Jonathan Wu

Session: WF17, Human-Focused Communications in the 3D Continuum

Paper IDW56

SUPERVISED, GEOMETRY-AWARE SEGMENTATION OF 3D MESH MODELS

Keisuke Banba, Ryutarou Ohbuchi

Session: WF17, Human-Focused Communications in the 3D Continuum

Paper IDW75

ON-THE-FLY WATERMARKING OF VIDEOS FOR REAL-TIME APPLICATIONS

Sachin Mehta, Vijayaraghavan Varadharajan, and Rajarathnam Nallusamy

Session: WF17, Human-Focused Communications in the 3D Continuum

Paper IDW80

IMAGE FORENSICS WITH ROTATION-TOLERANT RESAMPLING DETECTION

Ruohan Qian, Weihai Li, Nenghai Yu, Zhuo Hao

Session: WF17, Human-Focused Communications in the 3D Continuum

Paper IDW161

INTELLIGENT VEHICLE DETECTION AND TRACKING FOR HIGHWAY DRIVING

Wanxin Xu, Meikang Qiu, Zhi Chen, Hai Su

Session: WF17, Human-Focused Communications in the 3D Continuum

AAMS-PS: The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

Chairs: Mohan S. Kankanali, National University of Singapore, Singapore

Abdulmotaleb El Saddik, University of Ottawa, Canada

Pradeep K. Atrey, University of Winnipeg, MB, Canada

Mohammad Anwar Hossain, King Saud University, Saudi Arabia

WeiQi Yan, Queen's University Belfast, UK

Opening

Time: 8:30 - 8:40, 13th July 2012

Room: 112

WF6

Time: 8:40 - 10:20, 13th July 2012

Room: 112

Paper IDW113

CROWD DENSITY ESTIMATION BASED ON LOCAL BINARY PATTERN
CO-OCCURRENCE MATRIX

Zhe Wang, Hong Liu, Yueliang Qian and Tao Xu

*Session: WF6, The 2nd IEEE International Workshop on Advances in
Automated Multimedia Surveillance for Public Safety*

Paper IDW97

ABNORMAL EVENT DETECTION IN UNSEEN SCENARIOS

Mahfuzul Haque and Manzur Murshed

*Session: WF6, The 2nd IEEE International Workshop on Advances in
Automated Multimedia Surveillance for Public Safety*

Morning Tea

Time: 10:20-10:50

WF12

Time: 10:50 - 12:30, 13th July 2012

Room: 112

Paper IDW34

VEHICLE TYPE CLASSIFICATION USING PCA WITH SELF-CLUSTERING

Yu Peng, Jesse S. Jin, Suhuai Luo, Min Xu, Yue Cui

*Session: WF12, The 2nd IEEE International Workshop on Advances in
Automated Multimedia Surveillance for Public Safety*

Paper IDW171

DYNAMIC RESOURCE ALLOCATION FOR EVENT PROCESSING IN SURVEILLANCE SYSTEMS

Dewan Tanvir Ahmed

Session: WF12, The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

Paper IDW96

ROBUST BACKGROUND SUBTRACTION BASED ON PERCEPTUAL MIXTURE-OF-GAUSSIANS WITH DYNAMIC ADAPTATION SPEED

Mahfuzul Haque and Manzur Murshed

Session: WF12, The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

Lunch

Time: 12:30-13:30

WF18

Time: 13:30 - 15:10, 13th July 2012

Room: 112

Paper IDW114

A COMPUTATIONALLY EFFICIENT ALGORITHM FOR BUILDING STATISTICAL COLOR MODELS

Mingzhi Dong, Liang Yin, Weihong Deng, Jun Guo and Weiran Xu

Session: WF18, The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

Paper IDW190

RESOURCE ALLOCATION FOR SERVICE COMPOSITION IN CLOUD-BASED VIDEO SURVEILLANCE PLATFORM

M. Shamim Hossain, M. Mehedi Hassan, M. Al Qurishi and Abdullah Alghamdi

Session: WF18, The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

Paper IDW169

A ROBUST WAVELET-BASED APPROACH TO FINGERPRINT IDENTIFICATION

Mona Omidyeganeh, Abbas Javadtalab, Shahrokh Ghaemmaghami, Shervin Shirmohammadi

Session: WF18, The 2nd IEEE International Workshop on Advances in Automated Multimedia Surveillance for Public Safety

AIME: The 2nd International Workshop on Interactive Ambient Intelligence Multimedia Environments

Chairs: Ali Asghar Nazari Shirehjini, DAI-Labor, Technical University
Berlin, Berlin, Germany

Shervin Shirmohammadi, DISCOVERLab, University of Ottawa,
Ottawa, ON, Canada

Abdulsalam Yassine , Alcatel-Lucent, Ottawa, Canada

Opening

Time: 13:30 - 13:40, 13th July 2012

Room: 101

WF14

Time: 13:30 - 15:10, 13th July 2012

Room: 101

Paper IDW54

AN AUTOMATIC MULTI-SAMPLE 3D FACE REGISTRATION METHOD
BASED ON THIN PLATE SPLINE AND DEFORMABLE MODLE

Wenyu Qin, Yongli Hu, Yanfeng Sun and Baocai Yin

*Session: WF14, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW107

ON THE APPLICATION OF THE PROBABILISTIC LINEAR DISCRIMINANT
ANALYSIS TO FACE RECOGNITION ACROSS EXPRESSION

Moh Edi Wibowo, Dian Tjondronegoro, Ligang Zhang

*Session: WF14, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW70

CREATIVE TRANSFORMATIONS OF PERSONAL PHOTOGRAPHS

Yi Wu, Kalpana Seshadrinathan, Wei Sun, Maha El Choubassi, Joshua
Ratcliff and Igor Kozintsev

*Session: WF14, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW187

HUMAN GESTURE ANALYSIS USING MULTIMODAL FEATURES

Dan Luo, Hazim Kemal Ekenel, Ohya Jun

*Session: WF14, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Afternoon Tea

Time: 15:10-15:40

WF20

Time: 15:40 - 17:00, 13th July 2012

Room: 101

Paper IDW39

MULTI-INSTANCE LEARNING WITH AN EXTENDED KERNEL DENSITY
ESTIMATION FOR OBJECT CATEGORIZATION

Ruo Du, Qiang Wu, Xiangjian He, Jie Yang,

*Session: WF20, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW125

MOTION SEGMENTATION BASED ON 3D HISTOGRAM AND
TEMPORAL MODE SELECTION

Dibyendu Mukherjee and Q. M. Jonathan Wu

*Session: WF20, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW121

EXERLEARN BIKE: AN EXERGAMING SYSTEM FOR CHILDREN'S
EDUCATIONAL AND PHYSICAL WELL-BEING

Rajwa Al-Hrathi, Ali Karime, Hussein Al-Osman and Abdulmotaleb El
Saddik

*Session: WF20, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

Paper IDW179

A NOVEL SVM BASED FOOD RECOGNITION METHOD FOR CALORIE
MEASUREMENT APPLICATIONS

Parisa Pouladzadeh, Gregorio Villalobos, Rana Almaghrabi, Shervin
Shirmohammadi

*Session: WF20, The 2nd International Workshop on Interactive
Ambient Intelligence Multimedia Environments*

DEMOS

Demos

Time: 16:30-18:30, 10th July 2016

Room: 102

Paper ID: 9114

A Demonstration of a Hierarchical Multi-Layout 3D Video Browser -
Demo Paper for ICME 2012

Christopher Müller, Martin Smole and Klaus Schöffmann

Session: DEMO, ICME2012 Demos

Paper ID: 9115

Interactive 3D Animation System for Web3D

Masayuki Furukawa, Shinya Fukumoto, Hiroshi Kawasaki, Yukiko Kawai

Session: DEMO, ICME2012 Demos

Paper ID: 9116

A Multi-User Interaction System Based on Kinect and Wii Remote
(Demonstration Paper for ICME 2012)

Yihua Lou, Wenjun Wu, Hui Zhang, Haikuo Zhang, Yongquan Chen

Session: DEMO, ICME2012 Demos

Paper ID: 9117

Surround Sound Using Variable-Ambisonics and Variable-Polar
Pattern Theories

Martin J. Morrell, Joshua D. Reiss, Sonia Wilkie

Session: DEMO, ICME2012 Demos

Paper ID: 9118

Novel Wireless Routers for Seamless Sharing of Video Access in
Multihop Networks

Kien A. Hua, Steven Nichols, Vaithiyanathan Sundaram, Fei Xie

Session: DEMO, ICME2012 Demos

Paper ID: 9119

Demonstration paper for ICME 2012: LOOK2 - A Video-based System
for Real-time Notification of Relevant Traffic Events

Roland Tusch, Felix Pletzer, Vijay Mudunuri, Armin Kraetschmer,
Karuna Sabbavarapu, Marian Kogler, Laszlo Boeszoermyi,
Bernhard Rinner, Manfred Harrer, Thomas Mariacher, Peter Hrasnig

Session: DEMO, ICME2012 Demos

Paper ID: 9120

OpenGL SC Implementation over an OpenGL ES 1.1 Graphics Board

Nakhoon Baek, Hwanyong Lee

Session: DEMO, ICME2012 Demos

Paper ID: 9121

A Codeword Visualization Tool for Dense Trajectory Feature

Sang Phan, Vu Lam, Son Tran, Thang Duc Ngo, Duy-Dinh Le, Shin'ichi Satoh

Session: DEMO, ICME2012 Demos

TUTORIALS

Tutorials

Tutorial AMC: Ambient Media Computation – A Service and Business Level Perspective

Artur Lugmayr, Tampere University of Technology, Tampere, Finland)

Time: 9:00-12:30, 9th July 2012

Room: 102

Media evolved from media that can be described as integrated presentation in one form (multimedia). From multimedia, media evolved towards embedding the consumer in a computer graphic generated synthetic world (virtual reality). From this point on, media evolved to the consumers directly exposed to the media in their natural environment, rather than computer interfaces (ambient media). In addition, media will be evolving towards a fully real/synthetic world undistinguishable from pure media integrating human capacity (biomedia or bio-multimedia) somewhere in the very far distant future. The goal is to train and educate participants in new innovative service design for ambient computation. The course will cover potential and possibilities of this new multimedia field and its relation to other trends, such as ubicom, pervasive computation, affective computation, and tangible media. Specific key-concepts of ambient media are developed based on various business case studies.

Brief Biography:

Artur Lugmayr: Prof. Dr. Artur Lugmayr describes himself as a creative thinker of future media environments, and his scientific work is situated between art and science. His vision is to create innovative media experiences with emerging media platforms tagged with solid business models and processes. Starting from July 2009 he is full-professor for entertainment and media production management at the Department of Business Information Management and Logistics at the Tampere University of Technology (TUT) and founded the EMMi Lab. Besides many achievements, he is engaged in Dr.-Arts studies at Aalto Univ., Helsinki besides his completed Dr.-Techn. studies; was guest scientist at several universities and/or hold guest lectures/talks (e.g. Harvard Medical School/USA, QUT/Australia, KTH/Sweden, UFAM/Brasil, Univ. of Neuchatel/Switzerland); founder of the Ambient Media Association (AMEA); established several competitions situated between art and

technology (e.g. Nokia Ubimedia MindTrek Award, EuroITV Grand Challenge); contributed numerous scientific works; and founded the production company LugYmedia Inc.

Tutorial APCDP: Advances in Perceptual Coding of Digital Pictures

K. R. Rao, The University of Texas at Arlington, USA

Hong Ren Wu, Royal Melbourne Institute of Technology, Australia

Time: 9:00-12:30, 9th July 2012

Room: 111

Traditional definition of digital picture coding covers compression of visual data in form of both still images and moving or motion pictures or image sequences or videos [1]. Digital picture compression products, systems and applications proliferated over the past two decades, at a pace which had never been witnessed since the pioneering work by Goodall at Bell Labs in 1949 [2], in visual communications and entertainment, including video telephony, video conferencing, digital television (TV) broadcasting including Standard Definition or SD, High Definition or HD and three-dimensional or 3-D video signals, IPTV (Internet Protocol TV), IP CCTV (Closed-Circuits TV), video streaming and on-demand services, PACS (Picture Archiving and Communication System) for biomedical imaging, satellite imaging, DVD and HD DVD/Blue-ray products, broadband wireless and multimedia communications (click [here](#) for more details).

Brief Biography:

K. R. Rao: Prof. K. R. Rao received the Ph. D. degree in electrical engineering from The University of New Mexico, Albuquerque in 1966. He received B.S. E.E from the college of engineering, Guindy, India in 1952. Since 1966, he has been with the University of Texas at Arlington where he is currently a professor of electrical engineering. He, along with two other researchers, introduced the Discrete Cosine Transform (DCT) in 1975 which has since become very popular in digital signal processing. DCT, INTDCT, directional DCT and MDCT (modified DCT) have been adopted in several international video/image/audio coding standards such as JPEG/MPEG/H.26X series and also by SMPTE (VC-1) and by AVS China. He is the co-author of the books "Orthogonal Transforms for Digital Signal Processing" (Springer-Verlag, 1975), Also recorded for the blind in Braille by the Royal National Institute for the blind. "Fast Transforms: Analyses and Applications" (Academic Press, 1982), "Discrete Cosine Transform-Algorithms, Advantages, Applications" (Academic Press, 1990) (click [here](#) for more details).

Hong Ren Wu: Dr.Hong Ren Wu received his BEng. and MEng. degrees from University of Science and Technology, Beijing, China, in 1982 and 1985 respectively. He received his Ph.D. degree in electrical and computer engineering from The University of Wollongong, NSW, Australia, in 1990. Dr Wu was on academic staff of Monash University from 1990 to 2005, last as an associate professor. He has been a professor of visual communications engineering with Royal Melbourne Institute of Technology (RMIT University) since 2005 and concurrently served as Head of Computer and Network Engineering from Feb. 2005 to Jan. 2010 (click [here](#)for more details).

Tutorial MCEMCD: Network Coding for Efficient Multimedia Content Delivery

Anil Fernando, University of Surrey, UK

Time: 9:00-12:30, 9th July 2012

Room: 112

With the increasing popularity of multimedia content such as ultra-high definition video, multi-view video, free viewpoint video etc., it is a challenge for network service providers to distribute such high volume content at a high throughput while maintaining the required standard of quality of service. Popular internet applications such as live streaming, IP TV, web conferencing, etc. require delivering high volume multimedia content among multiple receivers. The usage of multicast technologies enables to deliver content to multiple receivers much more efficiently compared to unicast, albeit the question arises, are network resources utilized optimally?

Network Coding is a novel concept of network coding to optimally utilize network bandwidth. This treats information transmitted in a multicast network quite distinctively to the notion of regarding information as fluids. In network coding, information packets are coded at intermediate nodes. This increases the throughput at which information is delivered to receivers in a multicast network and improves the robustness against packet errors and losses. Due to such advantages, it is appealing to utilize network coding in practical networks to enhance network resource utilization and increase the quality of service.(click [here](#) for more details).

Brief Biography:

Anil Fernando: Anil Fernando (SMIEEE) is a Reader and leads the Video Codec group at the University of Surrey, UK. He has been working in video coding and communications since 1998 and has published more than 250 international refereed journal and proceeding papers in this area. Furthermore, he has published more than 130 international refereed journal and conference papers in multimedia communications. He has contributed to several international projects and currently he is leading 3D video communications work in two large scale projects funded by the European Union on Media communications. Recently he won the IEEE Chester Sall award sponsored by the IEEE Consumer Electronic Society for one of his work on 3D video compression. Most Recent Tutorials (during last 4 years): IEEE ICME 2011, IEEE ICME 2010, ICME 2009, ICME 2008, ICME2007, IEEE ICASP 2009, IEEE ICIP 2007.

Tutorial MTPPT: Multimedia Tagging: Past, Present and Future

Jialie Shen, Singapore Management University, Singapore

Meng Wang, National University of Singapore, Singapore

Xian-Sheng Hua, Microsoft Research, USA

Time: 13:30-17:00, 9th July 2012

Room: 102

The tags have proved to be a very crucial mechanism to facilitate the effective sharing and organization of large scale of multimedia information. As a result, technical developments on intelligent multimedia tagging have attracted a substantial amount of efforts involving experts from information retrieval, multimedia computing and artificial intelligence (particularly computer vision). The truly interdisciplinary research has resulted in many algorithmic and methodological developments. Meanwhile, many commercial web systems (e.g., Youtube, Last.fm, Facebook and Flickr) have successfully introduced a variety of toolkits to assist different users in discovering and exploring media content using tags.

Brief Biography:

Jialie Shen: Dr. Jialie Shen is an Assistant Professor in Information Systems and Lee Foundation Fellow, School of Information Systems, Singapore Management University, Singapore. He received his PhD in Computer Science from the University of New South Wales (UNSW), Australia in the area of large-scale media retrieval and database access methods. Dr. Shen's main research interests include information retrieval, economic-aware media analysis, and statistical machine learning. His recent work has been published or is forthcoming in leading journals and international conferences including ACM SIGIR, ACM Multimedia, ACM SIGMOD, CVPR, ICDE, WWW, IEEE Transactions on Circuits and Systems for Video Technology (IEEE TCSVT), IEEE Transactions on Multimedia (IEEE TMM), ACM Multimedia Systems Journal, ACM Transactions on Internet Technology (ACM TOIT) and ACM Transactions on Information Systems (ACM TOIS).

Meng Wang: Dr. Meng Wang is currently a research staff member in the National University of Singapore. Previously he worked as an associate researcher in Microsoft Research Asia and a research scientist in a start up in the Bay area. Dr. Wang's research interests include multimedia content analysis, tagging, search, and large-scale computing. Dr. Wang has authored about 80 technical papers in these areas. He is an associate editor of Information Sciences, an associate editor of Neurocomputing, and a guest editor of the special issues for Multimedia Systems Journal, Multimedia Tools and Applications, and Journal of Visual Communication and Image

Representation. He received the Best Paper Award continuously from the ACM International Conference on Multimedia 2010 and 2009, and the Best Paper Award from the International Multimedia Modeling Conference 2010.

Xian-Sheng Hua: Dr. Hua is now a Principle Research and Development Lead with Microsoft Bing, working on multimedia search. Before that, he had been with Microsoft Research Asia, Beijing, for nine years, where he was a Lead Researcher with the media computing group. His current research interests are in the areas of image and video content analysis, multimedia search, management, authoring, sharing, mining, advertising and mobile multimedia computing. He has authored or co-authored more than 190 publications in these areas and has more than 60 filed patents or pending applications. He serves as an Associate Editor of IEEE Transactions on Multimedia, Associate Editor of ACM Transactions on Intelligent Systems and Technology, Editorial Board Member of Advances in Multimedia and Multimedia Tools and Applications, and editor of Scholarpedia (Multimedia Category).

Tutorial HAA: Human action analysis with 2D and 3D sensors

Junsong Yuan, Nanyang Technological University, Singapore
Zicheng Liu, Microsoft Research Redmond, USA

Time: 13:30-17:00, 9th July 2012
Room: 111

Human action analysis is a critical task and emerging topic in many multimedia applications. In the past few years, there has been a lot of progress in action recognition with conventional 2D video cameras. Effective techniques have been developed to address many challenging issues in real world environments such as dynamic and cluttered background and occlusions. More recently, the availability of commodity depth cameras has brought a new level of excitement to this field. Rapid progress has been made that addresses new technical issues in action recognition with 3D depth cameras. In this tutorial, we introduce the basics for human action analysis, using both regular and depth cameras. The topics cover the action analysis using depth cameras, action and abnormal event detection in surveillance videos, as well as action analysis in user-generated consumer videos, such as movies and Youtube videos.

Brief Biography:

Zicheng Liu: Dr. Zicheng Liu is a senior researcher at Microsoft Research, Redmond. His current research interests include human activity recognition, face modeling and animation, and multimedia collaboration. He received a Ph.D. in Computer Science from Princeton University. He has published over 80 papers in peer-reviewed international journals and conferences, and holds over 50 granted patents. He co-authored a book entitled "Face Geometry and Appearance Modeling: Concepts and Applications", Cambridge University Press, 2011. He has served in the technical committees for many international conferences. He is a technical co-chair of both 2010 and 2014 ICME, a co-organizer of 2011 and 2012 CVPR Workshops on Human Activity Understanding from 3D Data, and a general co-chair of 2012 IEEE Visual Communication and Image Processing. He is an associate editor of both Machine Vision and Applications journal and Journal of Visual Communications and Image Representation. He is a senior member of IEEE.

Junsong Yuan : Junsong Yuan is a Nanyang Assistant Professor at Nanyang Technological University (NTU), Singapore, and currently the program director of video analytics at Infocomm Center of Excellence, School of EEE, NTU. He received the EECS outstanding Ph.D. Thesis award from Northwestern University, USA, and the Doctoral Spotlight Award from IEEE Conf. on Computer Vision and Pattern Recognition (CVPR'09). He has been invited to present his

action detection work in a number of universities and industry labs in the past three years, including UIUC, Peking University, Chinese Academy of Science, Microsoft Research Redmond, Motorola Applied Research Center, Nokia Research Center etc. He has published 60 papers in peer-reviewed journals and conferences, and filed three US patents and one international patent. He is the co-chair of two workshops at IEEE CVPR'12 and has served as editor, co-chair, PC member and reviewer of many international journals and conferences/workshops/special sessions.

Tutorial LMVDW: Learning and Mining with Visual Data on the Web

Jiebo Luo, University of Rochester, USA

Time: 13:30-17:00, 9th July 2012

Room: 112

Increasingly rich and large-scale image related data are being posted to social network and media sharing websites. Researchers from multidisciplinary areas, including machine learning, computer vision, data mining, and human machine interaction, are developing methods for employing such multi-modality data for various applications. This tutorial provides an overview of representative recent advances in this arena of opportunities and challenges.

First, we discuss Web 2.0 which gave rise to the enormous amount of visual data on the Web. Next, we describe a new computational machinery, Heterogeneous Feature Machines (HFM), which was proposed to address the multi-modality feature issue in image and video recognition by building a kernel logistic regression model based on similarities that combine different features and distance metrics with group LASSO constraints. Second, we review the recently popular data driven approaches that has seemingly diminished the need for machine learning in favor of simply relying on large scale data. We then show why it is important to address crucial machine learning issues in order to intelligently leverage large scale web data to solve problems such as searching personal images directly by keywords and recognizing events in personal videos. Finally, we focus on a new area of current research where trends and sentiments can be drawn by mining the sharing patterns of uploaded and downloaded social multimedia. By aggregating large scale multimedia data across millions of Internet users, we reveal the wisdom that is embedded in social multimedia sites for product and service recommendations and suggestions, as well as for prediction and forecasting in politics, economics, and marketing.

Brief Biography:

Jiebo Luo: Jiebo Luo joined the Computer Science Deptment at the University of Rochester in Fall 2011 after a prolific career of over fifteen years at Kodak Research Laboratories, where he was a Senior Principal Scientist leading research and advanced development. He has been involved in numerous technical conferences, including serving as the general chair of ACM CIVR 2008, program co-chair of IEEE CVPR 2012 and ACM Multimedia 2010, area chair of IEEE ICASSP 2009-2011, ICIP 2008-2011, CVPR 2008 and ICCV 2011, and an organizer of ICME 2006/2008/2010 and ICIP 2002. Currently, he serves on several IEEE Technical Committees (IVMSP, MMSP, and

MLSP) and conference steering committees (ACM ICMR and IEEE ICME). He is the Editor-in-Chief of the Journal of Multimedia, and has served on the editorial boards of the IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Multimedia, IEEE Transactions on Circuits and Systems for Video Technology, Pattern Recognition, Machine Vision and Applications, and Journal of Electronic Imaging. He is a Fellow of the SPIE, IEEE, and IAPR. His research interests span image processing, computer vision, machine learning, data mining, medical imaging, and ubiquitous computing. He has been an advocate for contextual inference in semantic understanding of visual data, and continues to push the frontiers in this area by incorporating geo-location context and social context. A recent research thrust focuses on exploiting social media for machine learning, data mining, and human-computer interaction, for example, mining the wisdom of crowds for social, political, and economic prediction and forecasting. He has published extensively with over 180 papers and 60 US patents.

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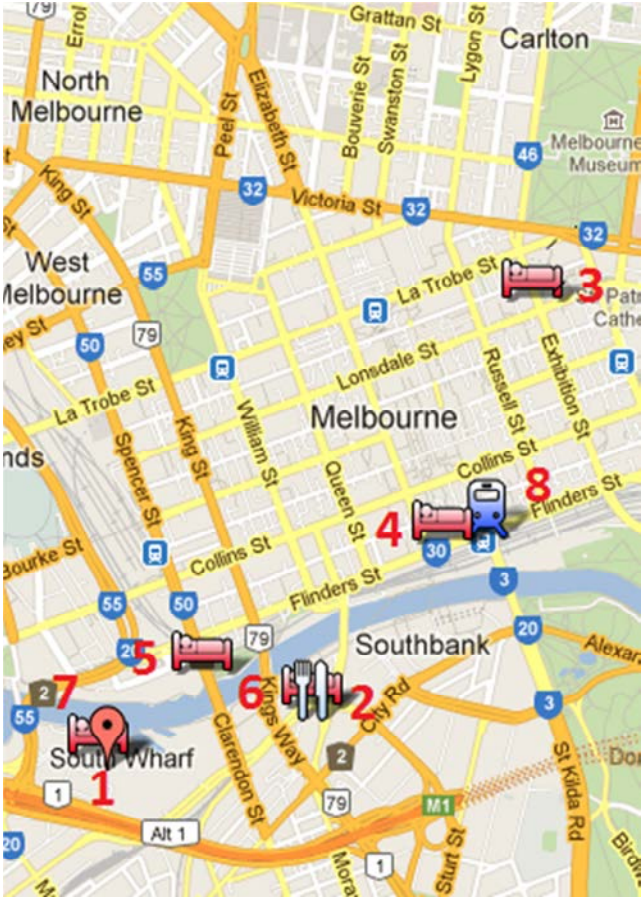
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Regional MAP

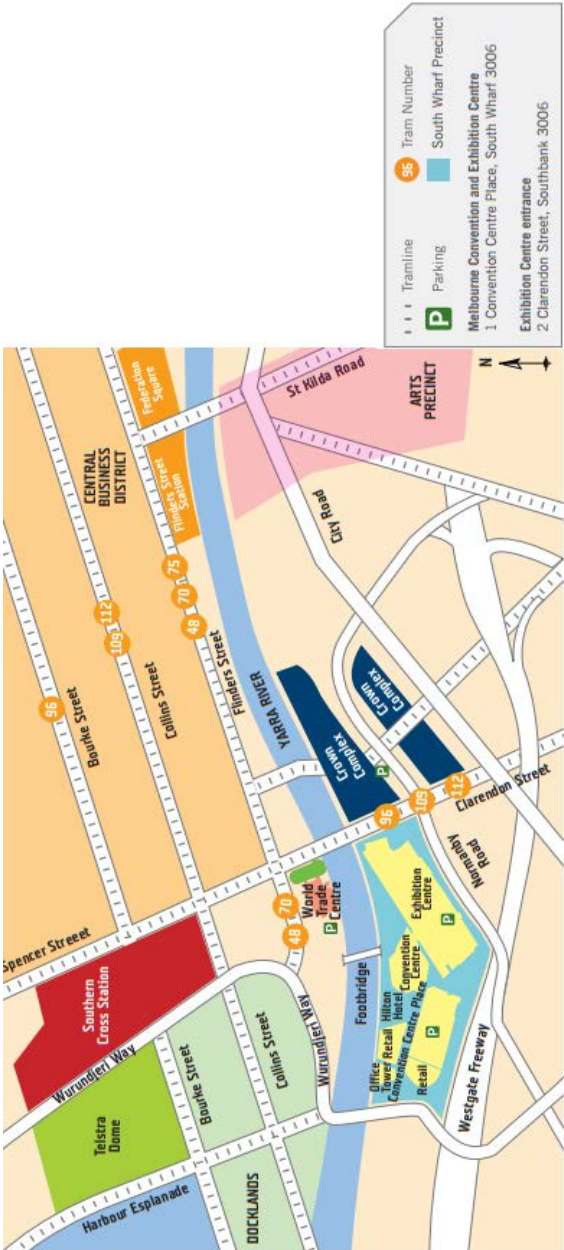


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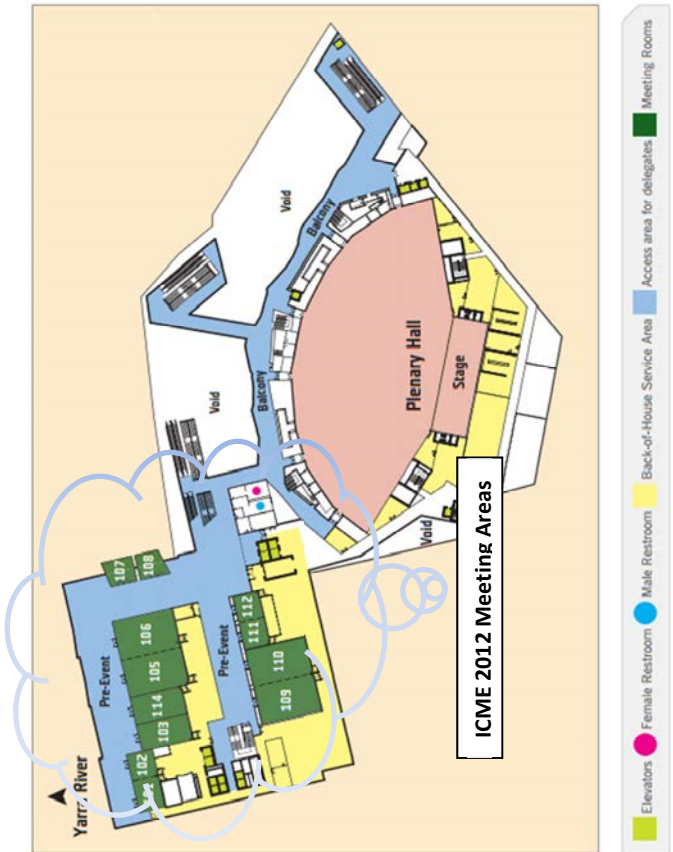
1. Conference Venue & Welcome Reception:
Melbourne Convention Centre
2. Conference Banquet : Crown Towers,
Melbourne Casino Function Hall (Level 1 - River Room 8
Whiteman Street, Southbank VIC 3006, Australia)
3. Hotel: Melbourne Marriott Hotel
4. Hotel: Citigate Melbourne Hotel
5. Hotel: Crowne Plaza Hotel Melbourne
6. Hotel: Crown Promenade
7. Hotel: Hilton Melbourne South Wharf - South Wharf
8. Flinders Street Station

Convention Center MAP

MCEC Princinct & Transport Map



MCC LEVEL 01



Emergency Procedure

Internal Telephone Numbers:

In any emergency notify your Event Security provider immediately, or dial internally from the nearest wall phone:

Ext: 6666 Fire, Medical, Security (emergency only) enquiries
MCEC Security Control Centre will dial 000 to co-ordinate
Emergency Services response as required.

Ext: 8333 Non-emergency Security enquiries (or dial
9235 8333 from any phone)

Fire:

On discovering a Fire:

Dial Ext: 6666 (on internal phones) or (03) 9235 8333 from any phone.

Familiarise yourself with the nearest fire exit and follow Warden's instructions. Do not use the lifts. Only trained Security personnel or Wardens may use fire extinguishers if it is safe.

Medical Emergencies:

In any Medical emergency notify your Event Security or First Aid provider immediately, or report First Aid/Medical incidents to the Security Control Centre:

Dial Ext: 6666 (on internal phones) or (03) 9235 8333 from any phone.

Evacuation:

In the event of an emergency one of two alarms will sound.

ALERT

The Alert Alarm:

It is operated from the building Emergency Warning Intercommunication System. It is designed to alert everyone within the vicinity of a possible emergency.

This is only a warning alarm, please standby for further instructions.

The Evacuation Alarm:

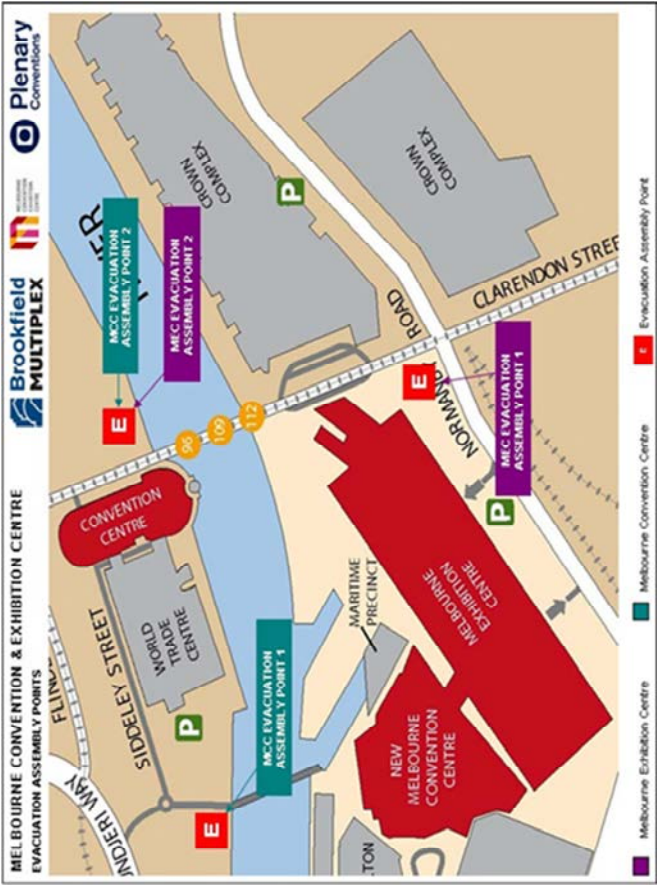
It is designed to notify all occupants that an evacuation is necessary. When you hear the Evacuation Alarm all occupants are directed by Wardens to leave via the Emergency Exits. All persons must follow directions issued by the Wardens and assemble at the nearest Evacuation Assembly Area.

Emergency Evacuation Assembly Areas:

In case of an emergency, Wardens will guide you to the most appropriate evacuation point.

Area	Evacuation Assembly Point 1	Evacuation Assembly
Melbourne Exhibition Centre	Tea House Area	John Batman Park
New Melbourne Convention Centre	Flinders Wharf Park (across the new Yarra River	John Batman Park

Note: The Evacuation Assembly Areas may be subject to change at the discretion of the Chief Fire Warden, to suit the location of the emergency, type of emergency, crowd density and wind conditions.



We would like to thank Melbourne Convention and Exhibition Center for providing these maps and related information in this booklet.

This bookelet is designed by: Qiang Wu, Jingsong Xu and Jian Zhang.