

Internet Imaging

Conference Chairs: **Giordano B. Beretta**, Hewlett-Packard Co.; **Raimondo Schettini**, Istituto Tecnologie Informatiche Multimediali, CNR (Italy)

Program Committee: **Robert R. Buckley**, Xerox Corp.; **Shih-Fu Chang**, Columbia Univ.; **Lucy Cherkasova**, Hewlett-Packard Labs.; **Alberto Del Bimbo**, Univ. degli Studi di Firenze (Italy); **Ullas Gargi**, Hewlett-Packard Co.; **Theo Gevers**, Univ. of Amsterdam (Netherlands); **Jennifer Gille**, Raytheon ITSS; **Neil J. Gunther**, Performance Dynamics Consulting; **Roger-David Hersch**, École Polytechnique Fédérale de Lausanne (Switzerland); **Yasuyo G. Ichihara**, Hosen Gakuen Junior College (Japan); **Corinne Jörgensen**, SUNY/Buffalo; **Lloyd McIntyre**, Xerox Corp.; **Marco Padula**, Istituto Tecnologie Informatiche Multimediali, CNR (Italy); **Simon Shim**, San Jose State Univ.; **Maureen Stone**, StoneSoup Consulting; **Sabine E. Süssstrunk**, École Polytechnique Fédérale de Lausanne (Switzerland); **Ingeborg Tastl**, Sony Electronics Inc.; **Alain Trémeau**, Univ. Jean Monnet (France); **Robert A. Ulichney**, Compaq Computer Corp.; **Yujin Zhang**, Tsinghua Univ. (China)

Wednesday 24 January

Plenary Speaker

Wednesday * 8:30 to 9:15 am

Digital Cinema: More Than a Century After Lumiere

Larry J. Hornbeck, Texas Instruments

See pg. xx for details.

SESSION 1 Wed. 9:30 am to 12:20 pm

Systems and Architecture

Chairs: **Maureen Stone**, StoneSoup Consulting;
Sabine E. Süssstrunk, École Polytechnique Fédérale
de Lausanne (Switzerland)

Printing images from the WEB (*Invited Paper*), R. Eschbach, Xerox Corp. [EI24-01]

DjVu document browsing with on-demand loading and rendering of image components, Y. LeCun, L. Bottou, A. Erofeev, P. Haffner, AT&T Labs.; B. Riemers, LizardTech Inc. [EI24-02]

Multispectral Internet imaging, H. Brettel, F. J. Schmitt, École Nationale Supérieure des Télécommunications (France) [EI24-03]

Multilingual system using Internet imaging, T. Mori, R. Iida, Y. Hata, H. Murakami, H. Kakugawa, T. Ae, Hiroshima Univ. (Japan) [EI24-04]

Object recognition and image retrieval over the Internet, C. Nastar, A. Winter, S. Gilles, J. Feldmar, N. Poirier, R. Bousquet, B. Bussy, LookThatUp.com (France) [EI24-05]

Intelligence: client-side and server-side architectures for photo site image enhancement, D. M. Pfeiffer, DPA Software [EI24-06]

Lunch/Exhibit Break

SESSION 2 Wed. 1:30 to 5:00 pm

Visual Organization

Chairs: **Jennifer Gille**, Western Aerospace; **Corinne Jörgensen**, SUNY/Buffalo

Vision theory guiding web communication (*Invited Paper*), L. W. Stark, NeurOptics Inc. and Univ. of California/Berkeley; C. M. Privitera, Y. F. Ho, K. Siminou, A. Weinberger, Univ. of California/Berkeley [EI24-07]

Indexing and retrieving web documents as direct manipulation of images, G. Patrizia, F. Ferri, Consiglio Nazionale delle Ricerche (Italy); P. Mussio, Univ. degli Studi di Brescia (Italy); M. Padula, Consiglio Nazionale delle Ricerche (Italy) [EI24-08]

Retina-like sensors technology for live image transmission on Internet, G. Sandini, Univ. degli Studi di Genova (Italy); P. Questa, F. Berton, AITEK Srl (Italy); A. Mannucci, Video Display Systems Srl (Italy); D. Scheffer, FillFactory (Belgium) [EI24-09]

New classification strategy for color documents, R. Schettini, C. Brambilla, A. Valsasna, Consiglio Nazionale delle Ricerche (Italy); M. De Ponti, ST Microelectronics (Italy) [EI24-10]

Automatic page layout using genetic algorithm for electronic albuming, A. C. Loui, Eastman Kodak Co.; J. Geigel, theatre.com [EI24-11]

Image representations for accessing and organizing web information, J. I. Helfman, AT&T Labs. West; J. D. Hollan, Univ. of California/San Diego [EI24-12]

Internet mobile terminal usability, A. Hasegawa, Netyear Group Corp. and Univ. of Tokyo (Japan); K. Aihara, T. Uehara, Netyear Group Corp. (Japan) [EI24-13]

Panel Discussion, To be decided

Thursday 25 January

Plenary Speaker
Thursday * 8:30 to 9:15 am
It's 2001: Where's HAL?
David G. Stork, Ricoh Silicon Valley
See pg. xx for details.

SESSION 3 Thurs. 9:30 to 10:30 am

Video Summarization

Chair: **Robert A. Ulichney**, Compaq Computer Corp.

Distributional clustering for content-based browsing of unstructured video (*Invited Paper*), G. Iyengar, IBM Thomas J. Watson Research Ctr. [EI24-15]

Mosaic-based query paradigm for content-based video retrieval, J. Assfalg, A. Del Bimbo, Univ. degli Studi di Firenze (Italy); M. Hirakawa, Hiroshima Univ. (Japan) [EI24-16]

JOINT SESSION Thurs. 11:00 am to 12:20 pm

Joint session for participants of conferences EI24 and EI28.

Image Retrieval

Chairs: **Shih-Fu Chang**, Columbia Univ.; **Theo Gevers**, Univ. of Amsterdam (Netherlands)

Pre-filtering with Retinex in color image retrieval, A. Rizzi, Univ. degli Studi di Brescia (Italy); G. Ciocca, Consiglio Nazionale delle Ricerche (Italy); D. Marini, Univ. degli Studi di Milano (Italy); R. Schettini, S. Zuffi, Consiglio Nazionale delle Ricerche (Italy) [EI24-17]

Using positive and negative examples for precise image retrieval, J. Assfalg, A. Del Bimbo, P. Pala, Univ. degli Studi di Firenze (Italy) [EI24-18]

Dynamic multiscale image classification, A. H. Salden, Telematica Instituut (Netherlands) [EI24-19]

Using combination of fuzzy partitions and surfaces for image retrieval in melanomas databases, M. Larabi, N. Richard, C. Fernandez-Maloigne, Univ. de Poitiers (France) [EI24-20]

Lunch/Exhibit Break

SESSION 5 Thurs. 1:50 to 4:00 pm

Metadata

Chairs: **Alain Tremeau**, Univ. Jean Monnet (France); **Marco Padula**, Consiglio Nazionale delle Ricerche (Italy)

iFind: an image retrieval and semi-automatic annotation scheme for large image databases in Internet, X. Zhu, Fudan Univ. (China); H. Zhang, W. Liu, Microsoft Research China; L. Wu, Fudan Univ. (China) [EI24-21]

Classifying images using multiple binary-class decision trees for object-based image retrieval, L. Jia, L. Kitchen, Univ. of Melbourne (Australia) [EI24-22]

Multimedia database system with embedding MPEG-7 meta data, Y. M. Ro, H. K. Kang, Y. J. Jung, Information and Communications Univ. (Korea) [EI24-23]

Accessing textual information embedded in Internet images, A. Antonacopoulos, D. Karatzas, Univ. of Liverpool (UK); J. Ortiz-Lopez, Univ. Politecnica de Catalunya (Spain) [EI24-24]

Thematico-visual image retrieval: how to deal with partially indexed corpora, G. Duffing, Lab. Lorrain de Recherche en Informatique et ses Applications (France) [EI24-25]

SESSION 6 Thurs. 4:00 to 5:00 pm

Visualization

Chair: Simon Shim, San Jose State Univ.

Interactive visualization of energy consumption using VRML, T. Kuroda, A. Nakamura, Y. Manabe, K. Chihara, Nara Institute of Science and Technology (Japan) [EI24-26]

Photorealistic rendering over the Internet for restoration support of ancient buildings, M. Rossi, Politecnico di Milano (Italy); D. Marini, Univ. degli Studi di Milano (Italy); A. Rizzi, Univ. degli Studi di Brescia (Italy) [EI24-27]

Indexing VRML objects with triples, Y. C. Yang, J. D. Yang, H. J. Yang, O. B. Gwun, Chonbuk National Univ. (Korea) [EI24-28]

Benchathlon

Chair: Ullas Gargi, Hewlett-Packard Co.

Benchathlon: a benchmark for image retrieval over the Internet, G. B. Beretta, Hewlett-Packard Co. [EI24-30]

Benchathlon Event 5:20 pm to 6:00 pm

Thursday 25 January

SESSION 11 Thurs. 6:00 to 7:00 pm

Posters

✓ **Quicklink: a system for the generation of similarity links in web image archives**, I. Gagliardi, B. Zonta, Consiglio Nazionale delle Ricerche (Italy) [EI24-14]

✓ **Mathematical morphology three-dimensional binary image representation**, D. N. Vizireanu, V. Lazarescu, A. Vizireanu, C. Pirnog, Politechnica Univ. Bucharest (Romania) [EI24-29]

✓ **Three-dimensional foveated visualization on the web**, J. Schermann, J. L. Barron, I. A. Gargantini, Univ. of Western Ontario (Canada) [EI24-40]

✓ **Pre-media: influence of calibration and color management (CM)**, W. F. Steiger, K. Schläpfer, Swiss Federal Institute for Materials, Testing and Research (Switzerland); S. Paus, Swiss Federal Institute for Materials, Testing and Research (Switzerland) and Univ. Wuppertal (Germany); C. Li, Swiss Federal Institute for Materials, Testing and Research (Switzerland) [EI24-50]

Friday 26 January

SESSION 7 Fri. 8:30 to 10:10 am

Telepresence and Collaborative Design

Chairs: Ingeborg Tastl, Sony Electronics Inc.;
Simon Shim, San Jose State Univ.

Low-cost system for real-time integration of virtual and real distributed environments, N. Balossino, Univ. degli Studi di Torino (Italy); F. Bresciani, Alenia Aerospazio (Italy); M. Lucenteforte, S. Siracusa, Univ. degli Studi di Torino (Italy) [EI24-31]

Very low rate video processing, S. Santini, PRAJA, Inc. [EI24-32]

Collaborative design using distributed virtual reality over the Internet, C. Toinard, F. Costantini, A. Sgambato, Conservatoire National des Arts et Métiers (France); N. Chevassus, F. Gaillard, AEROSPATIALE-MATRA (France) [EI24-33]

Distributed monitoring architecture for movable objects over the GSM system, J. F. Chen, W. C. Lin, C. M. Chung, K. H. Tsai, Z. Y. Jian, Tamkang Univ. (Taiwan) [EI24-34]

Design of an MPEG-4 based multimedia e-mail system, G. Wang, L. Liao, Chongqing Univ. of Posts and Telecommunications (China) [EI24-35]

SESSION 8 Fri. 10:30 am to 12:10 pm
Medical Applications

Chair: Roger-David Hersch, École Polytechnique Fédérale de Lausanne (Switzerland)

Telepresence in ENT surgery, W. Freysinger, A. Gunkel, W. Thumfart, Univ. Innsbruck (Austria); M. J. Truppe, ARTMA Inc. (Austria) [EI24-36]

Web tools for effective retrieval, visualization, and evaluation of cardiology medical images and records, M. Masseroli, F. Pinciroli, Politecnico di Milano (Italy) [EI24-37]

Acquisition and review of diagnostic images for use in medical research and for medical testing examinations via the Internet, M. A. Pauley, B. Pitman, Univ. of Nebraska/Omaha; G. V. Dalrymple, Univ. of Nebraska Medical Ctr.; Q. Zhu, Univ. of Nebraska/Omaha; W. K. Chu, R. Wobig, R. Bunting, Univ. of Nebraska Medical Ctr. [EI24-38]

Visible human slice sequence animation web server, J. C. Bessaud, R. D. Hersch, École Polytechnique Fédérale de Lausanne (Switzerland) [EI24-39]

Lunch Break

JOINT SESSION Fri. 1:30 to 2:30 pm

Joint session for participants of conferences EI24 and EI28.

Video Retrieval

Chair: Yujin Zhang, Tsinghua Univ. (China)

Three-dimensional semantic object tracking in video sequences, J. Gao, A. Kosak, Purdue Univ. [EI24-41]

Approach of sports programs classification using motion information in MPEG domain, Y. He, S. Yang, Y. Zhong, Tsinghua Univ. (China) [EI24-42]

Motion feature extraction for content-based video sequence retrieval, T. Yu, Y. Zhang, Tsinghua Univ. (China) [EI24-43]

Friday 26 January

SESSION 10 Fri. 2:30 to 4:50 pm
Color and Compression

Chair: Lloyd McIntyre, Xerox Corp.

Invariant variational principle for model-based interpolation of high-dimensional clustered data, R. C. Venkatesan, Systems Research Corp. (India) [EI24-44]

Geometric compression with predictable compression ratio, Z. Le, T. Lu, D. Y. Yun, Univ. of Hawaii/Manoa [EI24-45]

Scene cut detection for MPEG video sequences, S. Lopes, C. Lodato, Consiglio Nazionale delle Ricerche (Italy) [EI24-46]

What do you see in a digital color dot picture such as the ISHIHARA pseudoisochromatic plates? Y. G. Ichihara, Hosen Gakuen College (Japan) [EI24-47]

Combining multiple image descriptions for browsing and retrieval, Y. Chahir, Ecole Centrale de Lyon (France); S. Jomni, Univ. de Bourgogne (France) [EI24-48]

Digital color imaging representation and retrieval

cross Internet, G. Y. Tian, Univ. of Huddersfield
(UK) [EI24-49]