# **Advance Program and Call for Participation**



# June 13-15, 2011 Nara Centennial Hall, Nara, JAPAN

# *Topics* **Machine Vision and its Applications**

IAPR Invited Speakers

**Prof. Nassir NAVAB (Technical University of Munich)** "Model Guided Multimodal Imaging and Visualization for Computer Assisted Interventions"

**Prof. James M. REHG (Georgia Institute of Technology)** "Behavior Imaging: Using Computer Vision to Study Autism"

**Prof. Keiji SANEYOSHI (Tokyo Institute of Technology)** "Stereo Vision System on Automobile for Collision Avoidance"

> Sponsored by MVA Organization IAPR TC-8 NAIST

# In cooperation with

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For further information, please contact: **MVA Organization, c/o Prof. Katsushi IKEUCHI** Institute of Industrial Science, The University of Tokyo Komaba 4-6-1, Meguro-ku, Tokyo 153-8505, JAPAN Phone: +81-3-5452-6242 Fax: +81-3-5452-6244 E-mail: **mva2011-sec@mva-org.jp** Website: **http://www.mva-org.jp/mva2011**/

# **Advance Program**

## Monday, June 13, 2011

**Registration** (9:10 - 9:40)

Opening Session (9:40 - 9:50)

#### Session 1: Video Analysis (9:50 - 10:50)

- 1-1 Classification of Pedestrian Behavior in Shopping Mall based on LRF and Camera Observations Kotaro Okamoto, Akira Utsumi, Tetsushi Ikeda, Yamazoe Hirotake, Takahiro Miyashita, Abe Shinji, Norihiro Hagita, Kazuhiro Takahashi (Japan)
- 1-2 An Adaptive Particle Filter Method for Tracking Multiple Interacting Targets Isabella Szottka, Matthias Butenuth (Germany)
- 1-3 Method of Updating Shadow Model for Shadow Detection based on Nonparametric Bayesian Estimation Shinji Fukui, Wataru Kurahashi, Yuji Iwahori, Robert J. Woodham (Japan)

#### Break (10:50 - 11:10)

#### Session 2: Invited Talk 1 (11:10 - 12:10)

Behavior Imaging: Using Computer Vision to Study Autism Prof. James M. REHG (Georgia Institute of Technology)

#### Lunch (12:10 - 13:40)

#### Session 3: MVA Award candidates 1 (13:40 - 15:00)

- 3-1 **Fast and Structure-preserving Inpainting Based on Probabilistic Structure Estimation** *Takashi Shibata, Akihiko Iketani, Shuji Senda* (Japan)
- 3-2 Homogeneous Superpixels from Random Walks Frank Perbet, Atsuto Maki (United Kingdom)
- 3-3 A Blanket Binarization Method for Character String Extraction
  - Hiromi Yoshida, Naoki Tanaka (Japan)
- 3-4 Gaussian Neighborhood Descriptors for Brain Segmentation Henrik Skibbe, Marco Reisert, Hans Burkhardt (Germa-

ny)

#### Session 4: Poster Session 1 (15:00 - 16:30)

#### (Motion, 3D, Recognition, Feature)

4-1 Trajectory Generation for 1000 fps Direct Visual Servoing

Roel Pieters, Pieter P. Jonker (Netherlands)

4-2 Motion Estimation for Hybrid Cameras Using Point and Line Feature Fusion

Sang Ly, Cédric Demonceaux, Pascal Vasseur (France)

- 4-3 A Quick Browsing System for Surveillance Videos Cheng-Chieh Chiang, Ming-Nan Tsai, Huei-Fang Yang (Taiwan)
- 4-4 Evaluation of Synchronization Accuracy between High Speed Cameras in Infrared and Visible Spectrums

Senya Polikovsky (Japan)

- 4-5 Bottlenecks and Tradeoffs in Ultra High Frame Rate Visual Servoing : A Case Study Zhenyu Ye, Yifan He, Roel Pieters, Bart Mesman, Henk Corporaal, Pieter P. Jonker (Netherlands)
   4-6 Detecting Frame Duplication Based on Spatial and
- **Temporal Analyses** *Guo-Shiang Lin, Jie-Fan Chang* (Taiwan)
- 4-7 Map-based Trajectory Analysis (MBTA) for Atypical Event Detection Frederik Meysel (Germany)
- 4-8 Image Driven Generation of Pose Hypotheses for 3D Model-based Tracking Martim Brandão, Alexandre Bernardino, Jose Santos-Victor (Portugal)
- 4-9 Sequential Particle Filter for Multiple Object Tracking Nam Trung Pham, Karianto Leman, Teck Wee Chua

(Singapore)

- 4-10 Multi-Class Co-training Learning for Object and Scene Recognition Xian-Hua Han, Yen-wei Chen, Xiang Ruan (Japan)
- 4-11 Similar Partial Copy Recognition for Line Drawings Using Concentric Multi-Region Histograms of Oriented Gradients Weihan Sun, Koichi Kise (Japan)
- 4-12 **Object Detection in Images with Insufficient Dynamical Range** Zujun Hou, Yue Wang, How Lung Eng, Ruijiang Luo (Singapore)
- 4-13 Inhibition of Return in the Bayesian Strategy to Active Visual Search Kai Welke, Tamim Asfour, Rüdiger Dillmann (Germany)
- 4-14 Query-by-Sketch Image Retrieval Using Edge Relation Histogram

Yoshiki Kumagai, Toru Arikawa, Gosuke Ohashi (Japan)
4-15 Object Category Recognition by Bag-of-Features Using Co-Occurrence Representation by Foreground

- **and Background Information** Tomoyuki Nagahashi, Hironobu Fujiyoshi (Japan)
- 4-16 Common Visual Pattern Detection by Mixture Particle Filtering
- Kota Aoki, Hiroshi Nagahashi (Japan)4-17 Estimation of Minimum Quantization Levels by Using
- **Reconstructed Histogram** Munetoshi Numada, Hiroyasu Koshimizu (Japan)
- 4-18 Unsupervised Learning for Efficient Three-Dimensional Sequence Recovery *Thomas Edward Warsop* (United Kingdom)
- 4-19 Direct Shape Carving: Smooth 3D Points and Normals for Surface Reconstruction Kazuki Matsuda, Norimichi Ukita (Japan)

- 4-20 **3D Object Reconstruction from Image Sequences with a One Line Search Method** *Jian Zhang, Graziano Chesi* (China)
- 4-21 **Optimal Computation of 3-D Rotation under Inhomogeneous Anisotropic Noise** *Hirotaka Niitsuma, Kenichi Kanatani* (Japan)
- 4-22 New Algorithm for Reconstructing Stereoscopic Disparity: Implementing Cepstral filtering Using Gabor filters

Sheena Sharma (India)

- 4-23 A Free-Viewpoint TV System Yuichi Yaguchi, Takashi Matsuzaki, Toshimitsu Suzuki, Yukihiro Yoshida, Yuichi Okuyama, Takahashi Kazuaki, Ryuichi Oka (Japan)
- 4-24 Alignment of 3D Shape Data by Hashing Sets of Feature Points Yuka Kohno, Osamu Yamaguchi, Toshio Sato, Bunpei Irie (Japan)
  4-25 Slant-invariant Stagger Grid Pattern Projection with
- **Error-tolerant Decoding Technique for One-shot Shape Measurement** *Tetsuri Sonoda, Shinichiro Uno, Kenji Saitoh, Shinji Uchiyama* (Japan)
- 4-26 Facades Modeling from a Ground-View Video with Map Constraints Ruijun Liu, Myriam Cécile Julie Servières, Guillaume Moreau (France)
- 4-27 **Object Reconstruction and Recognition leveraging an RGB-D Camera** *Nicolas Burrus, Luis Moreno, Mohamed Abderrahim,*
- Jorge Garcia (Spain)
  4-28 A Level Set Method for Joint 3-D Motion Estimation
- and Segmentation in Range Image Sequences Abderrahman Hmimia, Amar Mitiche (Canada)
- 4-29 Accurate 3-D Measurement System Using the Pico Projector-based Phase Shifting Techniques Ja Myoung Koo, Tai-Hoon Cho (Korea, South)
- 4-30 Auto-Determination of Camera Geometric Parameters for Scenario Simulations in Visual Surveillance Applications

Richard Chang, Nam Trung Pham, Karianto Leman, Yue Wang (Singapore)

- 4-31 Dense 3D Measurement of the Near Surroundings by Fisheye Stereo Nobuyuki Kita (Japan)
- 4-32 Superpixel Based Inpainting for Interactive 3D Indoor Modeler Kalaivani Thangamani, Takeshi Kurata, Tomoya Ishikawa (Japan)
- 4-33 **Range Camera for Simple behind Display Interaction** *Anton Treskunov, Seung Wook Kim, Stefan Marti* (United States of America)
- 4-34 **Dense Stereo Disparity Maps Real-Time Video Im**plementation by the Sparse Feature Sampling *Kunio Takaya* (Canada)

Break (16:30 - 16:50)

Session 5: MVA Award candidates 2 (16:50 - 18:30)

- 5-1 **Fast Focus Mechanism Using a Pair of Convergent and Divergent Lenses Differentially for Threedimensional Imaging** *Akira Ishii* (Japan)
- 5-2 Spectral-Differential Feature Matching and Clustering for Multi-Body Motion Estimation Alexey Potapov, Maxim Peterson, Anton Averkin, Igor Gurov (Russia)
- 5-3 Stabilizing Omnidirectional Videos Using 3D Structure and Spherical Image Warping Mostafa Kamali, Atsuhiko Banno, Jean-Charles Bazin, Katsushi Ikeuchi (Japan)
- 5-4 **Color Prior for Feature-based 3D Head Tracking** *Jixia Zhang, Haibo Wang, Franck Davoine, Chunhong Pan* (China)
- 5-5 A Head-Wearable Short-Baseline Stereo System for the Simultaneous Estimation of Structure and Motion *Hernan Badino, Takeo Kanade* (United States of America)

## **Tuesday, June 14, 2011**

Session 6: Feature based Techniques (9:30 - 10:50)

- 6-1 An Efficient Geometric Constraint Method for Robust Local Feature Matching Kai Chen, Zhou Yi, Qi Zheng, Xiaokang Yang, Li Song (China)
- 6-2 Keypoint Recognition Using Two-Stage Randomized Trees
- Shoichi Shimizu, Hironobu Fujiyoshi (Japan)
  6-3 Image Colorization Using Discriminative Textural Features
  Michal Kawulok, Jolanta Kawulok, Bogdan Smolka

(Poland)

6-4 Multi-Class Labeling Improved by Random Forest for Automatic Image Annotation Motofumi Fukui, Noriji Kato, Wenyuan Qi (Japan) Break (10:50 - 11:10)

Session 7: Inviter Talk 2 (11:10 - 12:10)

Model Guided Multimodal Imaging and Visualization for Computer Assisted Interventions *Prof. Nassir NAVAB* (Technical University of Munich)

#### Lunch (12:10 - 13:40)

#### Session 8: Inspection (13:40 - 15:00)

8-1 Semisynthetic Ground Truth for Dirt Particle Counting and Classification Methods Nataliya Strokina, Aki Mankki, Tuomas Eerola, Lasse Lensu, Jari Johannes Käyhkö, Heikki Kalviainen (Finland) 8-2 One-Class Classification for Anomaly Detection in Wire Ropes with Gaussian Processes in a Few Lines of Code Erik Rodner, Esther-Sabrina Wacker, Michael Kemm-

ler, Joachim Denzler (Germany)

- 8-3 **On-Line Detection of Imperfections in Laserbrazed Joints** *Daniel Fecker, Volker Märgner, Tim Fingscheidt* (Germany)
- 8-4 **3D Free-Form Object Material Identification by** Surface Reflection Analysis with a Time-of-Flight Range Sensor

Md. Abdul Mannan, Hisato Fukuda, Lu Cao, Yoshinori Kobayashi, Yoshinori Kuno (Japan)

#### Session 9: Poster Session2 (15:00 - 16:30)

(Application, Character, Image Processing, ITS)

- 9-1 New Ridge Flux Analysis for Fingerprint Minutiae Detection
  - Tomohiko Ohtsuka (Japan)
- 9-2 A Statistical Shape Model and SVMs Based Scheme for Visual Inspection of Microdrill Bits in PCB Production
  - Guifang Duan, Yen-wei Chen (Japan)
- 9-3 A Multi-Neural Network Approach to Image Detection and Segmentation of Gas Meter Counter Angelo Nodari, Ignazio Gallo (Italy)
- 9-4 Automatic Road Extraction from Printed Maps Sébastien Callier, Hideo Saito (Japan)
- 9-5 Development of Inspection System for Wooden Chopsticks

Takeshi Saitoh (Japan)

9-6 Camera Based Lumber Strength Classification System

Riku Aleksanteri Hietaniemi, Jari Hannuksela, Olli Johannes Silvén (Finland)

- 9-7 Measuring Ball Spin in Monocular Video Alexander Szep (Austria)
- 9-8 Color Recognition by Extended Color Space Method for 64-Color 2D Barcode Takuma Shimizu, Mariko Isami, Kenji Terada, Wata-

ru Ohyama, Tetsushi Wakabayashi, Fumitaka Kimura (Japan)

9-9 Extraction Method of Scallop Areas Using Shelly Rim Features Considering Bottom Sediment of Sand

Koichiro Enomoto, Masashi Toda, Yasuhiro Kuwahara (Japan)

- 9-10 Scene Analysis Based on Horse Vision System Hanchao Jia, Shigang Li (Japan)
- 9-11 Cooking Support System Utilizing Built-in Cameras and Projectors Shunsuke Morioka, Hirotada Ueda (Japan)
- 9-12 Daily Clothes Observation from Visible Surfaces Based on Wrinkle and Cloth-Overlap Detection Kimitoshi Yamazaki, Kotaro Nagahama, Masayuki Inaba (Japan)
- 9-13 Automated Vision-based System for Inspecting Glue Route Quality in Harddisk Drive Top Cover Assembly

Wirat Rajchawong, Pakorn Kaewtrakulpong (Thailand)

- 9-14 A Technique for Clustering Individual Defects from Images of Steel Strips in Periodical Defects Francisco Gonzalez Bulnes, Daniel Fernando Garcia, Ruben Usamentiaga, Julio Molleda (Spain)
- 9-15 Realtime Medicine Package Recognition Using Difference between Weighted Eigencolors Kenjiro Sugimoto, Sei-ichiro Kamata (Japan)
- 9-16 A Method for Fast Composing of Images Captured from Deformed Documents by a Quadocular Scanner Setup Marco Körner, Herbert Suesse, Wolfgang Ortmann, Joachim Denzler (Germany)
- 9-17 Off-Line Signature Verification Using Two Step Transitional Features Elias Zois, Konstantinos Tselios, Athanasios Nassiopoulos, Elias Siores, George Economou (Greece)
- 9-18 Binary Tree-based Accuracy-keeping Clustering Using CDA for Very Fast Japanese Character Recognition Yohei Sobu, Hideaki Goto (Japan)
- 9-19 Optical Character Verification of Print on Pharmaceutical Capsules Miha Mozina, Dejan Tomazevic, Franjo Pernus, Bostjan Likar (Slovenia)
- 9-20 Extraction of Character String Regions from Scenery Images Based on Contours and Thickness of Characters Tomohiro Nishino, Kimitoshi Yamazaki, Kei Okada,

Tomoniro Nishino, Kimitoshi Yamazaki, Kei Okada, Masayuki Inaba (Japan)

- 9-21 A New Method for Ranking of Word Hypotheses generated from OCR: The Application on the Arabic Word Recognition Houda Gaddour, Slim Kanoun, Hanen Guessmi (Tunisia)
- 9-22 A Lossless Data-hiding Technique Based on Wavelet Transform Hui-Yu Huang, Shih-Hsu Chang (Taiwan)
- 9-23 Fast Polar Cosine Transform for Image Description

Zhuo Yang, Sei-ichiro Kamata (Japan)

- 9-24 Histogram Enhancement Using Adaptive Segmentation Algorithm Chung-Cheng Chiu, Chiu Sheng-Yi, Yang Han-Ni, Lo Ching-Tung (Taiwan)
- 9-25 A Grayscale Image Authentication Method with a Pixel-Level Self-recovering Capability against Image Tampering Che Wei Lee lcw (Taiwan)
- 9-26 Controlled Illumination for the Object Recognition with Projector Camera Feedback Kazuki Osamura, Toshiyuki Amano, Makoto Fujisawa, Jun Miyazaki, Hirokazu Kato (Japan)
- 9-27 Fast Combined Separability Filter for Detecting Circular Objects Yasuhiro Ohkawa, Chendra Hadi Suryanto, Kazuhiro Fukui (Japan)
- 9-28 Study on Stimulation Effects for Driver Based on Fragrance Presentation Mariko Yoshida, Chie Kato, Yuki Kakamu, Mikiko Kawasumi, Hatsuo Yamasaki, Shin Yamamoto, Tomoaki Nakano, Muneo Yamada (Japan)
- 9-29 Real-Time Video Stabilization for Unmanned Aerial Vehicles Yue Wang, Zujun Hou (Singapore)

- 9-30 **UAV Motion Estimation Using Hybrid Stereoscopic Vision** *Damien Eynard, Pascal Vasseur, Cédric Demonceaux, Vincent Fremont* (France)
- 9-31 **Robust vSLAM for Dynamic Scenes** Jun Shimamura, Masashi Morimoto, Hideki Koike (Japan)
- 9-32 Vision-based Automatic Flight Control for Small UAVs Chung-Cheng Chiu, Lo Ching-Tung, Tsai Chung-

Hsieh, Chiu Sheng-Yi (Taiwan)

- 9-33 Quadrotor Helicopter Flight Control Using Hough Transform and Depth Map from a Microsoft Kinect Sensor John Ross Stowers, Michael Hayes, Andrew Bainbridge-Smith (New Zealand)
- 9-34 On-Road Obstacle Detection by Comparing Present and Past In-Vehicle Camera Images Haruya Kyutoku, Daisuke Deguchi, Tomokazu Takahashi, Yoshito Mekada, Ichiro Ide, Hiroshi Murase (Japan)
- 9-35 An Efficient Algorithm for UAV Indoor Pose Estimation Using Vanishing Geometry *Yuxiang Wang* (Singapore)

#### Break (16:30 - 16:50)

#### Session 10: 3D Reconstruction and Retrieval (16:50 -18:10)

- 10-1 Reconstructing 3D Land Surface from a Sequence of Aerial Images Shinya Mizoe, Yuichi Yaguchi, Takahashi Kazuaki, Kazuhiro Ota, Ryuichi Oka (Japan)
- 10-2 Augmenting Depth Camera Output Using Photometric Stereo Robert Anderson, Bjorn Stenger, Roberto Cipolla (United Kingdom)
- 10-3 A Globally Convergent Algorithm for Range Image Registration Based on Consistency Evaluation of Rigid Transformation Shingo Yamada, Ikuko Shimizu (Japan)
- 10-4 Skeleton Features Distribution for 3D Object Retrieval Tomoki Hayashi, Benjamin Raynal, Vincent Nozick,

Tomoki Hayashi, Benjamin Kaynai, Vincent Nozick, Hideo Saito (France)

Banquet (19:00 - 21:00)

## Wednesday, June 15, 2011

Session 11: Basic Techniques (9:30 - 10:50)

- 11-1 **Finite Element Laplacian Feature Detector** Dermot Kerr, Sonya Coleman, Bryan Scotney (United Kingdom)
- 11-2 A Parallelization Method for Multiview Stereo Masaru Fukushi, Naoki Sekiguchi, Toru Abe (Japan)
- 11-3 Fast Line Matching between Uncalibrated Disparate Views of Planar Surfaces Saleh Mosaddegh (France)
- 11-4 KNN Kernel Shift Clustering with Highly Effective Memory Usage Makoto Hirohata, Tomoyuki Shibata, Kazunori Imoto, Toshimitsu Kaneko (Japan)

#### Break (10:50 - 11:10)

#### Session 12: Invited Talk 3 (11:10 - 12:10)

Stereo Vision System on Automobile for Collision Avoidance Prof. Keiji SANEYOSHI (Tokyo Institute of Technology)

#### Lunch (12:10 - 13:40)

#### Session 13: Face Analysis (13:40 - 15:00)

- 13-1 Eye and Nose Fields Detection from Gray Scale Facial Images
  - Mahmoud Ali, Murakami Kenji, Shun Ido (Japan)
- 13-2 Efficient 3D Head Tracking via Multi-View Patch Classification

Haibo Wang, Franck Davoine, Chunhong Pan, Jixia Zhang (China)

- 13-3 Facial Feature Detection Using Generalized LVQ and Facial Shape Model
- Yusuke Morishita, Hitoshi Imaoka (Japan) 13-4 Identifying Important People in Broadcast News Videos

Hua Gao, Hazim Kemal Ekenel, Rainer Stiefelhagen (Germany)

Session 14: Poster Session 3 (15:00 - 16:30)

(Face, Human, Gesture, Pedestrian, Medical)

- 14-1 Robust Facial Feature Localization Using Improved Active Shape Model and Gabor Filter Hui-Yu Huang, Shih-Hang Hsu (Taiwan)
- 14-2 Non-Linear Speaker Verification Using Spatiotemporal Lip Information Chi Ho Chan, Budhaditya Goswami, Josef Kittler, William Christmas (United Kingdom)
- 14-3 A Face Identification Method of Non-Native Animals for Intelligent Trap. Mayumi Kouda, Masakazu Morimoto (Japan)
- 14-4 Edge-based Facial Feature Extraction Using Gabor Wavelet and Convolution Filters Rosdiyana Samad, Hideyuki Sawada (Japan)
- 14-5 Web-based Rapid Prototyping of Objects Using GPU-based Computing: Application to 3D Face Modeling Minh N'guyen, Patrice Delmas, Georgy Gimel'farb, Y.H. Chan, Alfonso Gastelum Strozzi, Alexander Woodward (New Zealand)
- 14-6 Face Super Resolution in Reduced Spaces by Using Shape and Texture Aydin Akyol, Muhittin Gokmen (Turkey)
- 14-7 Exploration on Far-Field Face Detection for Recognition Wang Zhifei (China)

- 14-8 Facial Analysis Aided Human Gesture Recognition for Human Computer Interaction Dan Luo, Hua Gao, Hazim Kemal Ekenel, Jun Ohya (Japan)
- 14-9 Detection of Swimmer Based on Joint Utilization of Motion and Intensity Information *Kwok-Leung Chan* (China)
- 14-10 Motion Analysis for Broadcast Tennis Video Considering Mutual Interaction of Players Naoto Maruyama, Kazuhiro Fukui (Japan)
- 14-11 Estimation of Human Body Orientation Using Histogram of Oriented Gradients Panachit Kittipanya-ngam, Soh Guat Ong, How Lung Eng (Singapore)
- 14-12 Learning Multi-Feature Human Motion Patterns by Automated Near-Optimal Constrained Gravitational Clustering Zhuo Chen, Nelson H.C. Yung (China)
- 14-13 Bottom-up Attention Improves Action Recognition Using Histograms of Oriented Gradients Go Tanaka, Yukie Nagai, Minoru Asada (Japan)
- 14-14 Particle Filter-based Fingertip Tracking with Circular Hough Transform Features Martin Do, Tamim Asfour, Rüdiger Dillmann (Germany)
- 14-15 Human Body Tracking and Joint Angle Estimation from Mobile-Phone Video for Clinical Analysis

Jehoon Lee, Peter Karasev, Liangjia Zhu, Allen Tannenbaum (United States of America)

14-16 Hand Gesture Recognition Using Histogram of Oriented Gradients and Partial Least Squares Regression

Arindam Misra, Takashi Abe, Takayuki Okatani, Koichiro Deguchi (Japan)

- 14-17 **Memory Based Human Region Detection** Ayaka Yamamoto, Yoshio Iwai, Hiroshi Ishiguro (Japan)
- 14-18 Headdress Detection Based on Saliency Map for Thangka Portrait Image Lu Yin, Weilan Wang (China)
- 14-19 Estimation of Thermal Comfort by Measuring Clo Value without Contact

Hiroki Matsumoto, Yoshio Iwai, Hiroshi Ishiguro (Japan)

14-20 Analyzing Engineering Tasks Using a Hybrid Machine Vision and Knowledge Base System Application

Ioannis Kaloskampis, Yulia Hicks, David Marshall (United Kingdom)

14-21 A Multi-staged System for Efficient Visual Person Reidentification

Kai Juengling, Michael Arens (Germany)

- 14-22 Human Skin Detection by Visible and Near-Infrared Imaging Yusuke Kanzawa, Yoshikatsu Kimura, Takashi Naito (Japan)
- 14-23 Measurement of Human Stature from Surveillance Camera Based on Projective Geometry Takuya Inoue, Hideo Saito, Makoto Kimura (Japan)
- 14-24 A Practical Video Digest Generation System Designed for Nursery Schools Yu Wang, Tomoya Ishikawa, Jien Kato, Kenichiro Ishii, Shigeki Yokoi (Japan)

14-25 Pedestrian Head Detection and Tracking Using Graph Skeleton for People Counting in Crowded Environments

*Kheir-Eddine Aziz, Djamal Merad, Nicolas Thome, Bernard Fertil* (France)

- 14-26 Stereo-based Pedestrian Detection Using Twostage Classifiers Manabu Nishiyama, Akihito Seki, Tomoki Watanabe (Japan)
- 14-27 Integrate Sparse Depth Information into Pedestrians Detection Yu Wang, Jien Kato, Kenichiro Ishii (Japan)
- 14-28 Towards an Automatic Blind Spot Camera: Robust Real-Time Pedestrian Tracking from a Moving Camera Kristof Van Beeck, Toon Goedemé, Tinne Tuytelaars (Belgium)
- 14-29 Robust Human Tracking Using Occlusion-Free Images from Multiple Video Cameras Kentaro Tsuji, Mingxie Zheng, Eigo Segawa, Morito Shiohara, Takashi Morihara (Japan)
- 14-30 Symmetrical Judgment and Improvement of Co-HOG Feature Descriptor for Pedestrian Detection *Hirokatsu Kataoka, Yoshimitsu Aoki* (Japan)
- 14-31 **Dual-direction Optical Breast Measuring System for Assisting X-Ray Mammography** *Hung-Chi Chiang, Min-Cheng Pan* (Taiwan)
- 14-32 **Low Bitrate Medical Image Compression** Antonius Darma Setiawan, Andriyan Bayu Suksmono, Tati Mengko, Hendra Gunawan (Indonesia)
- 14-33 Vessel Segmentation in Retinal Images Using Graph-Theoretical Vessel Tracking Suthit Rattathanapad, Bunyarit Uyyanonvara, Pradit Mittrapiyanuruk, Pakorn Kaewtrakulpong (Thailand)
- 14-34 **Dynamic Programming and Fuzzy Classification** for the Automatic Segmentation of the Carotid in Ultrasound Images *Rui Rocha, Jorge Silva, Campilho Aurélio* (Portugal)

Break (16:30 - 16:50)

Session 15: Real-World Applications (16:50 - 18:10)

- 15-1 **Robust Image Acquisition for Vision-Model Coupling by Humanoid Robots** David Israel Gonzalez-Aguirre, Tamim Asfour, Rüdiger Dillmann (Germany)
- 15-2 An ID and Position Recognition Method employing Camera Motion Blur for Modulated LED Tube Lights

Chang Li, Daisuke Iwai, Kosuke Sato (Japan)

- 15-3 An Adaption of the Lucy-Richardson Deconvolution Algorithm to Noncentral Chi-Square Distributed Data Fabian Diewald, Jens Klappstein, Juergen Dickmann, Klaus Dietmayer (Germany)
- 15-4 **Towards Bendable Augmented Maps** Sandy Martedi, Hideo Saito (Japan)

Closing Session, Best Poster Award (18:10 - 18:30)

## Registration

Online registration forms are available at <u>http://www.mva-org.jp/mva2011/reg/registration.html</u> for oversea participants and <u>http://www.mva-org.jp/mva2011/reg/registration-ja.html</u> for domestic participants, respectively. For advance registration, the form must be received no later than **June 6, 2011**.

The registration fee depends on the date on which the registration form is received and the membership status of the participant. Please refer to the following table for details.

	by April 8, 2011	by May 10, 2011	by June 6, 2011	on-site
Speaker	40,000JPY Speaker		s must register by April 8, 2011	
Participant (member)	40,000JPY		45,000JPY	50,000JPY
Participant (non-member)	45,000JPY		50,000JPY	55,000JPY
Non-presenter student	10,000JPY			
Extra page	10,000JPY / page			

Note: Reduced member fee is applied if the participant is a member of either one of an IAPR regional representative societies or societies<sup>\*</sup> in cooperation with MVA2011. The registration includes a copy of the proceedings and banquet attendance. However, the student registration does not include these.

Authors: At least one author for each paper must complete an advance registration as a speaker by April 8, 2011 to ensure that their papers are included in the proceedings. However, it is not necessary to register more than once if the speaker has multiple papers. Just indicate all the paper numbers upon registration. The registration fee for speakers is not refundable.

The registration fee for an advance registration can be paid by the following methods until **June 6**, 2011.

• Bank transfer

Bank:	Mizuho Bank, Ltd
Branch:	Roppongi Branch
Account number:	1673751
Account name:	MVA2011
SWIFT:	MHBKJPJT

Only payments in Japanese yen (JPY) are acceptable. Please state clearly the participant's name if it differs from the remitter's name. Bank surcharges are to be paid by the participant.

• Credit card (only for participants from outside Japan)

We accept VISA, MasterCard, and American Express. Credit card information including the card number, cardholder's name, expiration date, signature, and date should be sent to the following address:

Prof. Katsushi Ikeuchi, Institute of Industrial Science University of Tokyo 4-6-1, Komaba, Meguro-ku Tokyo 153-8505, Japan Phone: +81-3-5452-6242 Fax: +81-3-5452-6244

For participants other than speakers, the registration fee can be refunded, less a handling fee, only when a written notice of cancellation is received no later than **June 6**, **2011**.

Advance registration closes on **June 6**, **2011**. Thereafter, only on-site registration is accepted. On-site registration fee must be paid by cash in Japanese yen. The registration desk is open at the conference site everyday during the conference.

Student participation is welcome. Students not having any presentation are entitled to a special discount rate.

<sup>&</sup>lt;sup>\*</sup> The Information Processing Society of Japan, The Institute of Electrical Engineers of Japan, The Institute of Electronics, Information and Communication Engineers, The Institute of Image Information and Television Engineers, The Institute of Systems, Control and Information Engineers, The Institute of Image Electronics Engineers of Japan, The Japanese Society for Artificial Intelligence, The Japanese Society for Non-destructive Inspection, The Japan Society for Precision Engineering, The Robotics Society of Japan, The Society of Instrument and Control Engineers, The Virtual Reality Society of Japan, The Society of Academic Study on Sensing via Image Information

# **Transportation Guide**

## **<u>1. From abroad to JR Nara Station</u>**

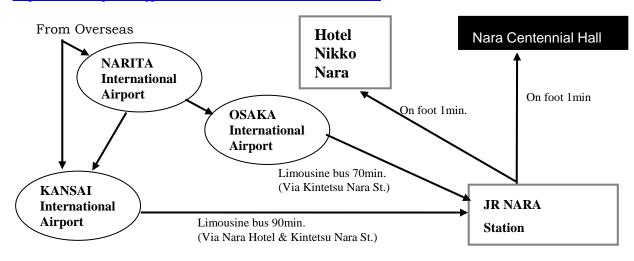
The convenient means of transportation to Nara from abroad are shown in the following diagram. For the most convenient way, please take a flight to Kansai International Airport (KIX). From there, the simplest route to JR Nara Station is by the Airport Limousine Bus, which takes approximately 90 minutes to arrive at JR Nara Station via Nara Hotel and Kintetsu Nara Station. JR Nara Station is the final destination of this Airport Limousine Bus.

This costs 2,000 yen one way, per person. Buses depart from stop No.9 and are scheduled to depart approximately once every 60 minutes. Should there be any inquiries regarding access to Nara, please ask at the Information Desk at the airport on the first floor in front of the arrivals area.

If you take a flight to Osaka International Airport via Narita International Airport, please board on a limousine bus at bus stop No.0 or No.10. The bus fare is 1,440 yen one way, per person.

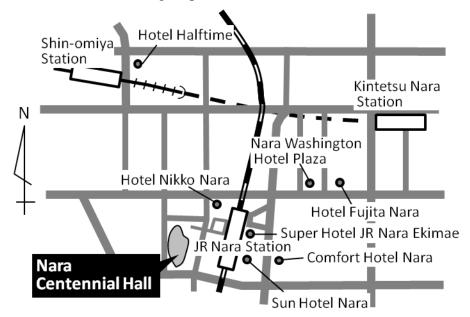
Limousine bus time table (from Kansai International Airport): <u>http://www.kate.co.jp/pc/e\_time\_table/e\_nara.html</u> Limousine bus time table (from Osaka International Airport):

http://osaka-airport.co.jp/access/limousine\_bus.html?SID=S63



## 2. From JR Nara Station to Conference venue and Banquet site

Nara Centennial Hall (conference venue) and Hotel Nikko Nara (banquet site) are very close to JR Nara Station as shown in the following map. It takes one minute on foot.



# **General Information**

## (1) Accommodations

Hotel accommodation is available at the conference web site. We have secured a sufficient number of rooms at hotels near the conference venue. You can reserve your room sending the hotel reservation request via the web site by April 30. For detail, please read the web site.

https://apollon.nta.co.jp/mva2011/

# (2) Social Events

On June 12 (Sunday), a day before the conference, we will have a welcome party on the first floor of the conference venue, Nara Centennial Hall. Light meal and drink will be served from 6pm to 8pm. A buffet-style banquet will be held in the evening of June 14 (Tuesday) at Hotel Nikko Nara, which is located next to the conference venue.

# (3) Visas

Visitors from some countries need visas to enter Japan. If so, apply at the Japanese Consulate or a diplomatic mission in your country. Please note that sometimes one to two months will be needed for obtaining the visa.

# (4) Climate

The weather in the Nara area during the conference is rainy and a little humid. The temperature in this season is about 18-25 degrees Centigrade (64-77 degrees Fahrenheit). An umbrella is advisable.

# (5) Currency

Currency cannot be exchanged at the conference site. Exchanging currency at Kansai International Airport (KIX), Narita International Airport, banks or hotels is recommended.

## (6) Traveler's checks and credit cards

The use of traveler's checks in Japan is not very popular. Credit cards, VISA, MasterCard, Diners Club and American Express, are widely accepted at hotels, shops and restaurants, although <u>we will not accept any credit card at</u> <u>the on-site registration.</u>

## (7) Electric Power

In Nara area, electric voltage is 100V and the frequency is 60Hz.