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Monday, June 18, 2012

08:30-10:30  Posters 1A - Computational Photography, Shape Representation and Matching, Illumination and Reflectance, Shape from X (Ballrooms D/E, B/C; Rooms 555 & 556)

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A Game-Theoretic Approach to Deformable Shape Matching
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Authors: Jian Liang, Rongjie Lai, Tsz Wai Wong, Hongkai Zhao

On the Dimensionality of Video Bricks under Varying Illumination
Authors: Youdong Zhao, Xi Song, Yunde Jia [Supplemental Material]

A Biquadratic Reflectance Model for Radiometric Image Analysis
Authors: Boxin Shi, Ping Tan, Yasuyuki Matsushita, Katsushi Ikeuchi

Single Image Multimaterial Estimation
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Depth from Optical Turbulence
Authors: Yuandong Tian, Srinivasa G. Narasimhan, Alan J. Vannevel [Supplemental Material]

Optimal Integration of Photometric and Geometric Surface Measurements Using Inaccurate Reflectance/Illumination Knowledge
Authors: Takayuki Okatani, Koichiro Deguchi [Supplemental Material]

Photometric Stereo for Outdoor Webcams
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Authors: Imari Sato, Takahiro Okabe, Yoichi Sato
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Authors: Marc Serra Vidal, Olivier Penacchio, Robert Benavente, Maria Vanrell
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Authors: Qi Shan, Sameer Agarwal, Brian Curless

A Learning-Based Framework for Depth Ordering
Authors: Zhaoyin Jia, Andrew Gallagher, Yao-Jen Chang, Tsuhan Chen

Example-Based 3D Object Reconstruction from Line Drawings
Authors: Tianfan Xue, Jianzhuang Liu, Xiaoou Tang

Angular Domain Reconstruction of Dynamic 3D Fluid Surfaces
Authors: Jinwei Ye, Yu Ji, Feng Li, Jingyi Yu
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Robust Photometric Stereo using Sparse Regression
Authors: Satoshi Ikehata, David Wipf, Yasuyuki Matsushita, Kiyoharu Aizawa
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2.5D Building Modeling by Discovering Global Regularities
Authors: Qian-Yi Zhou, Ulrich Neumann
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Shape, Albedo, and Illumination from a Single Image of an Unknown Object
Authors: Jonathan T. Barron, Jitendra Malik
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Robust Stereo with Flash and No-flash Image Pairs
Authors: Changyin Zhou, Alejandro Troccoli, Kari Pulli

Detection by Detections: Non-parametric Detector Adaptation for a Video
Authors: Xiaoyu Wang, Gang Hua, Tony X. Han

10:30-11:50 Orals 1A - Computational Photography (Ballroom A)

Oral
Richard Szeliski, James Hays

From Pixels to Physics: Probabilistic Color De-rendering
Decomposing Global Light Transport using Time of Flight Imaging
Authors: Di Wu, Matthew O'Toole, Andreas Velten, Amit Agrawal, Ramesh Raskar
[Supplemental Material]

Accidental Pinhole and Pinspeck Cameras: Revealing the Scene Outside the Picture
Authors: Antonio Torralba, William T. Freeman

Jigsaw Puzzles with Pieces of Unknown Orientation
Authors: Andrew C. Gallagher
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10:30-11:50 Orals 1B - Shape Representation and Matching (Exhibit Hall D)

Oral
Iasonas Kokkinos, Charless Fowlkes

Affine-Invariant, Elastic Shape Analysis of Planar Contours
Authors: Darshan Bryner, Anuj Srivastava, Eric Klassen

Progressive Graph Matching: Making a Move of Graphs via Probabilistic Voting
Authors: Minsu Cho, Kyoung Mu Lee

The Shape Boltzmann Machine: A Strong Model of Object Shape
Authors: Seyed M. Ali Eslami, Nicolas Heess, John Winn
[Supplemental Material]

Surface Regions of Interest for Viewpoint Selection
Authors: George Leifman, Elizabeth Sh trom, Ayellet Tal
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13:00-15:00 Posters 1B - Color and Texture, Early & Biological Vision, Image Based Modeling, Segmentation and Grouping (Ballrooms
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Fast and Globally Optimal Single View Reconstruction of Curved Objects
Authors: Martin R. Oswald, Eno Töppe, Daniel Cremers

Multi-Class Co-segmentation
Authors: Armand Joulin, Francis Bach, Jean Ponce
[Supplemental Material]

Improved Subspace Clustering via Exploitation of Spatial Constraints
Authors: Duc-Son Pham, Saha Budhadiya, Dinh Phung, Svetla Venkatesh

Figure-Ground Segmentation by Transferring Window Masks
Authors: Daniel Kuettel, Vittorio Ferrari

Automated Reconstruction of Tree Structures using Path Classifiers and Mixed Integer Programming
Authors: Engin Türeken, Fethallah Benmansour, Pascal Fua
[Supplemental Material]

Efficient Structure Detection via Random Consensus Graph
Authors: Hairong Liu, Shuicheng Yan

Efficient Inference for Fully-Connected CRFs with Stationarity
Authors: Yimeng Zhang, Tsuhan Chen

Learning Image-Specific Parameters for Interactive Segmentation
Authors: Zhanghui Kuang, Dirk Schnieders, Hao Zhou, Kwan-Yee K. Wong, Yizhou Yu, Bo Peng

Fixed-Rank Representation for Unsupervised Visual Learning
Authors: Risheng Liu, Zhouchen Lin, Fernando De la Torre, Zhixun Su
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Mode-Seeking on Graphs via Random Walks
Authors: Minsu Cho, Kyoung Mu Lee

Higher Order Motion Models and Spectral Clustering
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Ko Nishino, Yoichi Sato

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Camera Spectral Sensitivity Estimation from a Single Image under Unknown Illumination by using Fluorescence
Authors: Shuai Han, Yasuyuki Matsushita, Imari Sato, Takahiro Okabe, Yoichi Sato

Micro Phase Shifting
Authors: Mohit Gupta, Shree K. Nayar

A Closed-Form Solution to Uncalibrated Photometric Stereo via Diffuse Maxima
Authors: Paolo Favaro, Thoma Papadimitri

15:00-16:20 Orals 1D - Segmentation and Grouping
(Exhibit Hall D)

Oral
Kyoung Mu Lee, Eric Mortensen

Connected Contours: A New Contour Completion Model that Respects the Closure
Effect
Authors: Yansheng Ming, Hongdong Li, Xuming He

On Multiple Foreground Cosegmentation
Authors: Gunhee KIM, Eric P. Xing
[Supplemental Material]

Weakly Supervised Structured Output Learning for Semantic Segmentation
Authors: Alexander Vezhnevets, Vittorio Ferrari, Joachim M. Buhmann

A Unified Approach to Salient Object Detection via Low Rank Matrix Recovery
Authors: Xiaohui Shen, Ying Wu

16:20-18:30 Posters 1C - Vision for Graphics, Sensors, Medical, Vision for Robotics, Applications
(Ballrooms D/E, B/C; Rooms 555 & 556)

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