

## Friday Afternoon, Nov. 28, 2014

13:30 - 15:15, Room A501 - A503, Classroom Building A (教学楼A座)

| Session I-1. Computer Vision I   |   | Session I-2. Computer Graphics I   |  | Session I-3. Image and Video Processing I  |   |
|--|---|--|--|--|---|
| Chairman: A. Prof. Yun Liang (Room A501)   |   | Chairman: Dr. Guifeng Zheng (Room A502)  |  | Chairman: Dr. Kun Zeng (Room A503)   |   |
| Visual Tracking with Multi-level Dictionary Learning   | Yufeng Liu,<br>Huifang Zhang,<br>Zhuo Su, Xiaonan Luo       | A Geometric Interpolation Algorithm by Non-uniform Cubic B-Splines                     | Chunjing Li, Anning Wang,<br>Kai Li, Jinwu Liu | A Fast Intra-mode Decision Scheme for HEVC   | Wenpeng Ding,<br>Wenlong Shen,<br>Yunhui Shi,<br>Baocai Yin |
| Fine-Grained Vehicle Recognition via Detection-Classification-Tracking in Surveillance Video | Jin Zhan,<br>Huifang Zhang,<br>Xiaonan Luo                  | Ternary m-Point Approximating Subdivision Schemes                                      | Jiaze Sun, Jieqing Tan                         | Fast CU Size Decision Algorithm Based on Minimum Mean Squared Error Estimators       | Meihua Gu,<br>Tingting Yang,<br>Xinhui Liu                  |
| Real-Time Robust Hand Tracking Based on Camshift and Motion Velocity                         | Chenyang Chen,<br>Mingmin Zhang,<br>Kaijia Qiu, Zhigeng Pan | A New Scheme of Interpolation Subdivision Surface by Using the Bezier Curve            | Mao Aihua, Chen Jun,<br>Wang Ruomei, Luo Jie   | Single Image Super-resolution Using Multi-task Gaussian Process Regression           | Jianhong Li,<br>Dong Wang, Xiaonan Luo                      |
| Robust Face Recognition Based 121-Norm Sparse Representation                                 | Zhao Lu, Yanfeng Sun,<br>Yongli Hu, Baocai Yin              | A Fast 3-D Face Reconstruction Method  | Changming Meng, Fan Zhou,<br>Ruomei Wang       | A Novel Two-Step Approach for the Super-resolution Reconstruction of Video Sequences | Lei He,<br>Jieqing Tan,<br>Chengjun Xie,<br>Min Hu          |
| Principal Component Analysis in Linear Discriminant Analysis Space for Face Recognition      | Hang Su,<br>Xuansheng Wang                                  | Feature-Adaptive Frequency Domain Method to Representing 3D Medical Images             | Yihui Guo, Xiaonan Luo                         | Single-Frame Image Super-resolution Based on In-Place Patch Match Model              | Pan Qi  |
| Matrix Reduction Based on Generalized PCA Method in Face Recognition                         | Chunjing Li, Jinwu Liu,<br>Anning Wang, Kai Li              | Symmetry Based Chinese Ancient Architecture Reconstruction from Incomplete Point Cloud | Er Li, Xiaopeng Zhang,<br>Yanyun Chen          | A Content-Aware Scaling Method for Stereoscopic Images                               | Kehong Li,<br>Yongyi Gong,<br>Qi Li,<br>Lingmin Jiang       |

## Friday Afternoon, Nov. 28, 2014

15:30 - 17:15, Room A501 - A503, Classroom Building A (教学楼A座)

| Session I-1. Computer Vision II   |   | Session I-2. Computer Graphics II  |   | Session I-3. Image and Video Processing II                                   |                                 |
|---|---|--|---|--|---------------------------------|
| Chairman: Dr. Mouguang Lin (Room A501)  |   | Chairman: A. Prof. Aihua Mao (Room A502)   |   | Chairman: Dr. Xiaowei Xu (Room A503)   |                                 |
| A New Edge Detection Method Based on Hausdorff Distance                       | Lu You, Meng Qingxin, Guo Jiangtao              | Depth Sensing of Complex Scenes Using a Multimodal Pseudo-Random Structured Light      | Qianjun Wu, Shaofan Wang, Dehui Kong, Baocai Yin              | Image Edit by Boundary Difference Propagation                                | Pan Qi                          |
| Detection of Bifurcation Pixels in Edge Images                                | Qi Li, Yongyi Gong                              | Optimizing Mask and Dictionary of Compressive Light Field Photography                  | Zhangyu Yao, Yunhui Shi, Wenpeng Ding, Baocai Yin, Junbin Gao | Cuteness Recognition and Localization in the Photos of Animals               | Yu Bao                          |
| Concave Region Partitioning with a Greedy Strategy on Imbalanced Points       | Qi Li, Yongyi Gong, Yixuan Lu                   | The 3D Model Compression Method Based on Sparse Representation                         | Yong Zhang, Juan Xue, Dehui Kong, Baocai Yin                  | Adaptive Anisotropic Diffusion for Image Denoising Based on Structure Tensor | Kui Liu, Jieqing Tan, Benyue Su |
| Semantic Feature Extraction of 3D Human Model from 2D Orthographic Projection | Yuhui Hu, Jianping Wang, Tao Jiang, Shujin Lin  | 3D Virtual Garments Deformation Method Based on Size-Driven                            | Jianping Wang, Ruomei Wang, Fan Zhou                          | Non-local Means Image Denoising Algorithm Based on Edge Detection            | Kaihua Gan, Jieqing Tan, Lei He |
| Dictionary Learning in Reduced Dimension Space for Image Steganalysis         | Guoming Chen, Qiang Chen, Dong Zhang            | Free-Form Deformation of Parametric Surfaces Based on Extension Function with Platform | Li Zhang, Huifang Yu, Jieqing Tan                             | Color Transfer into Scenes   | Zisheng An                      |
| Mean Shift: A Method for Measurement Matrix of Compressive Sensing            | Guoming Chen, Qiang Chen, Dong Zhang            | Multi-boundary Mesh Parameterization with a Virtual Boundary                           | Wei Hu  | MRF and CRF Based Image Denoising and Segmentation                           | Wei Zhang, Min Li               |
| Texture Mapping Based on Projection and Viewpoints                            | Xuliang Guo, Yuhui Hu, Baoquan Zhao, Shujin Lin | An Improved Texture Mapping Model Based on Mesh Parameterization in 3D Garments        | You Fu, Fan Zhou, Ruomei Wang                                 | Progressive Secret Image Sharing with Meaningful Shadows                     | Di Yafeng                       |

## Saturday Afternoon, Nov. 29, 2014

13:30 - 15:15, Room A501 - A504, Classroom Building A (教学楼A座)

| Session I-1. Big Data Storage and Retrieval I   |  | Session I-2. Software Engineering   |  |
|---|--|---|--|
| Chairman: A. Prof. Bo Li (Room A501)  |  | Chairman: Dr. Xiangping Chen (Room A502)  |  |
| Incomplete Big Data Clustering Algorithm Using Feature Selection and Partial Distance           | Fanyu Bu,<br>Zhikui Chen,<br>Qingchen Zhang,<br>Xin Wang                             | A Platform for Searching UI Component of Android Application                                  | Kaiyuan Li,<br>Zhensheng Xu,<br>Xiangping Chen               |
| Textile Image Retrieval Based on BOF Approach   | Feng Zhao,<br>Fan Zhou,<br>Ruomei Wang   | Redesign of Fault Diagnosis Expert System with Manual Intervention and Self-Learning Function | Zhenzhen Zhou,<br>Xiangyu Chen                               |
| Sketch-Based Shape Retrieval Using Orientation Histogram with Gabor Filters                     | Yang Kang,<br>Haopeng Lei,<br>Shujin Lin, Yuhua Li                                   | An Example-Driven Approach for Automatic Extension of Monitoring Model                        | Yubin He,<br>Xiangping Chen                                  |
| 3D Model Retrieval Based on Three-Views Hand Drawn Sketches by Exploiting Contextual Similarity | Haopeng Lei,<br>Helian Chen,<br>Yuhua Li, Bin He,<br>Yongsheng Rao,<br>Guifeng Zheng | HAS: Hierarchical A-Star Algorithm for Big Map Navigation in Special Areas                    | Haifeng Wang,<br>Jiawei Zhou,<br>Guifeng Zheng,<br>Yun Liang |
| Hierarchical Matching Of 3D Shape Based On Heat Kernel Signature                                | Xu Jing  | ATM - Awesome Translation Machine   | Hongfei Wang   |
| Agent-Based Fault Tolerance Mechanism for Distributed Key-Value Database                        | Wu Hui-jun, Lu Kai,<br>Jiang Jing-fei,<br>Wang Shuang-xi                             |   |  |

## Saturday Afternoon, Nov. 29, 2014

13:30 - 15:15, Room A501 - A503, Classroom Building A (教学楼A座)

| Session I-3. Modeling & Simulation   |  | Session I-4. Digital Home Network and System   |  |
|--|--|--|--|
| Chairman: A. Prof. Shujin Lin (Room A503)  |  | Chairman: Prof. Yongyi Gong (Room A504)  |  |
| Simulation of a Multi-wing Chaotic System with Fractional-Order  | Qiang Chen,<br>Chaoxia Zhang                               | Research on Architecture of Smart Home Networks and Service Platform                                     | Xiaowei Xu, Ye Tao,<br>Xiaodong Wang,<br>Xiangqian Ding    |
| Directed-Hypergraph Based E-Learning Process Modeling Supporting Dynamic-Personalized-Combined Resource Optimization | Xuedong Sun, Zhonghua Li, Shicheng Hu                      | Service-Based Interactive Proxy for Sensor Networks in Smart Home: An Implementation of Home Service Bus | Ye Tao, Xiaowei Xu,<br>Xiaodong Wang                       |
| Concurrent Editing of Styling and Structure of Auto Body Based on Metamodels   | Li Baojun, Yang Lei,<br>Hu Ping, Liu Xiuping               | Modeling and Analysis of ZigBee Based Smart Home System  | Hong Zheng,<br>Haiteng Zhang, Li Pan                       |
| An Efficient Fifth Order Method for Systems of Non-linear Equations  | Qing Liu, Jieqing Tan,<br>Lei He                           | Health Information Exchange for Home-Based Chronic Disease Self-Management - A Hybrid Cloud Approach     | Jianping Ma,<br>Cong Peng,<br>Qiang Chen                   |
| Efficient Scheduling Mechanism for Performance-Heterogeneous Multi-core Processor                                    | Liu Lin-Dong,<br>Qi De-Yu,<br>Chen Qiang,<br>Ruan Jin-Xin  | A Novel ESD Protection Circuit for Passive RFID Transponder  | Jianguo Hu, Ge Lin,<br>Zhikui Duan,<br>Deming Wang, Jin Wu |
| A Hybrid Model for Simulation of Crowd Evacuation  | Xiaotian Wang,<br>Yong Zhang,<br>Dehui Kong,<br>Baocai Yin | An Approach for Generating Monitoring Component in Smart Home  | Kuo Liao,<br>Xiangping Chen                                |

## Saturday Afternoon, Nov. 29, 2014

15:30 - 17:15, Room A501 - A503, Classroom Building A (教学楼A座)

| Session I-1. Big Data Storage and Retrieval II  |   | Session I-2. Multimedia & Virtual Media  |  | Session I-3. User Interaction   |   |
|---|---|--|--|---|---|
| Chairman: Dr. Li Liu (Room A501)  |   | Chairman: Dr. Xiangping Chen (Room A502)   |  | Chairman: A. Prof Shujin Lin (Room A503)                                    |   |
| Constrained Frequent Subtree Mining Method  | Kun Han, Weifeng Lv, Baocai Yin, Yongli Hu          | Uniform Sound Pressure Level Distribution with Frequency Ranging from 600Hz to 1000Hz                          | Sai Ma, Yongqiang Pang, Zhaoxin Huang, Yutian Wang, Hui Wang | Study on WeChat User Behaviors of University Graduates                      | Donglu Song, Yujia Wang, Fang You                             |
| Template-Based Multiple Codebooks Generation for Fine-Grained Shopping Classification and Retrieval | Hui Liu, Zhuo Su                                    | Acoustic Feedback Effect Reduction Based on Path Compensation in Multichannel FXLMS Sound Inhibition Systems   | Xiao'e Liu, Qiwen Zou, Xue Wang, Ge Lin                      | Research on Prosody for Chinese Sign Language Synthesis                     | Li Jinghua, Yin Baocai, Wang Lichun, Kong Dehui, Wang Wentong |
| Semantic Segmentation and Labeling of 3D Garments   | Li Liu, Ruomei Wang, Fan Zhou, Zhuo Su, Xiaodong Fu | Quiet Area Detection in 3D Sound Field Simulation via Delaunay Triangulation                                   | Xiaoyan Liang, Zhe Fan, Ge Lin, Xiaonan Luo                  | Semantic-Oriented Shape Exploration for Car Styling                         | Wang Bo, Li Bao-Jun, Hu Ping, Song Ming-Liang                 |
| Stretching-Robust Laplace Spectral Descriptor for Non-rigid 3D Shape Retrieval                      | Yusong Liu, Zhixun Su, Junjie Cao, Hui Wang         | Multichannel LMS-Based Large Area Sound Inhibition in Home Environment: Preliminary Simulation and Experiments | Xue Wang, Xiao'e Liu, Qiwen Zou, Ge Lin                      | Leap Studio - A Virtual Interactive 3D Modeling Application Based on Web GL | Nhat Quang Do, Hongming Cai, Lihong Jiang                     |
| Pair-wise Diversity Measure for Multiple Classifier System Based on Evidence Theory                 | Yuan-Dong Lan, Qun Chen                             | Nonuniform Parametric Human Body Based on Model Reuse  | Lifeng Huang, Chengying Gao                                  | An On-Screen User Declaration Approach for 3-D Scene Manipulation           | Ye Tao, Xiaowei Xu, Xiaodong Wang                             |
| Object Level Saliency by Submodular Optimization  | Guangyu Zhong, Bo Li, Junjie Cao, Zhixun Su         | Heat and Moisture Transfer Computation Model Based on Parallel Simulation in Clothed Human                     | Nan Jia, Fan Zhou, Ruomei Wang                               | Efficient Facial Beautifier on Mobile Devices                               | Feng Yurao  |