

## 99年10月&11月 通過 學術審查

91 學年度入學 (博七)

### JOURNAL PAPERS

- J1. Chun-Han Lin, Chung-Ta King, and Ting-Yi Chen, "Constrained multiple deployment problem in wireless sensor networks with guaranteed lifetimes," accepted and to appear in **ACM Wireless Networks (WINET)**.
- SCI, SCIE, EI
  - Impact factor: 1.088
  - Thesis: chapter 5
- J2. Chun-Han Lin and Chung-Ta King, "Sensor-Deployment Strategies for Indoor Robot Navigation," in **IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans**, vol. 40, pp. 388-398, 2010.
- SCI, SCIE, EI
  - Impact factor: 2.033
  - Thesis: chapter 3
- J3. Nai-Luen Lai, Chun-Han Lin, and Chung-Ta King, "Scheduling algorithms and routing structures for efficient convergecast in wireless sensor networks," in *International Journal of Pervasive Computing and Communications*, vol. 6, pp. 4-18, 2010.

### Conference papers

- C1. Nai-Luen Lai, Chung-Ta King, and Chun-Han Lin, "On Maximizing the Throughput of Convergecast in Wireless Sensor Networks," in *Proceedings of the 3rd international conference on Advances in grid and pervasive computing (GPC)*, pages 396-408, 2008.
- EI
- C2. Chun-Han Lin, Chung-Ta King, and Hung-Chang Hsiao, "Region Abstraction for Event Tracking in Wireless Sensor Networks," in *Proceedings of the 8th International Symposium on Parallel Architectures, Algorithms and Networks (ISPAN)*, pages 274-281, 2005.
- Acceptance rate: 33%

### PATENTS

- PA1. Fu-Kuang Yeh, Long-Der Chen, Chung-Ta King, and Chun-Han Lin, "METHOD FOR INFORMATION TRANSMISSION WITH BACKBONE NETWORK AND A POSITION

MONITORING SYSTEM FOR MULTIPLE ROBOTIC DEVICES," submitted to USA and ROC Patent Offices, pending.

## **SUBMITTED PAPERS**

SP 1. Chun-Han Lin, Huang-Chen Lee and Chung-Ta King, "Periphery Deployment for Wireless Sensor Systems with Guaranteed Coverage Percentage," submitted to Journal of Systems and Software, 2<sup>nd</sup> revision.

- Thesis: chapter 4

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### A. Journal Papers

1. **Liao, C.-T.**, Wu, Y.-K. and Lai, S.-H., "Speech-Driven Mouth Animation Based on Support Vector Regression," *International Journal of Electronic Business Management*, Vol. 5, No. 1, 2007, pp. 19-25.(EI)
2. **Liao, C.-T.**, Lee, W.-H., Lai, S.-H., "A Flexible PCB Inspection System Based on Statistical Learning," *Journal of Signal Processing Systems*, 2010. (Accepted)(SCI, EI)
3. **Liao, C.-T.**, Lai, S.-H., "A Novel Robust Kernel for Visual Learning Problems," *Neurocomputing*, 2010. (Accepted) (SCI, EI)
4. **Liao, C.-T.**, Lai, S.-H., "A Novel Robust Kernel for Image Classification Problems," *IET Image Processing*. (under review)
5. **Liao, C.-T.**, Chuang, H.-J., Duan, C.-H., and Lai, S.-H., "Learning Spatial Weighting for Facial Expression Analysis via Constrained Quadratic Programming," *IEEE Transactions on Image Processing*. (ready for submission)

### B. Conference Papers

1. **Liao, C.-T.**, Wu, Y.-K. and Lai, S.-H., "Locating Facial Feature Points Using Support Vector Machines," in *Proc. the 9th IEEE International Workshop on Cellular Neural Networks and Their Applications (CNNA 2005)*, Hsingchu, Taiwan, 2005. (oral paper)
2. **Liao, C.-T.**, Wu, Y.-K. and Lai, S.-H., "Speech-Driven Mouth Animation Based on Support Vector Regression", in *Proc. the 10th Conference on Artificial Intelligence and Applications (TAAI)*, Kaohsiung, Taiwan, 2005. (Excellent Paper Award, 2/304)(oral paper)
3. **Liao, C.-T.** and Lai, S.-H., "A Robust Kernel Based on Robust  $\rho$ -Function", in *Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Hawaii, USA, 2007. (oral paper)
4. **Liao, C.-T.**, Wang, S.-F., Lu, Y.-J., and Lai, S.-H., "Real-Time Face Recognition from Video", in *Proc. IEEE International Conference on Multimedia and Expo (ICME)*, Hannover, Germany, 2008.
5. **Liao, C.-T.** and Lai, S.-H., "A Novel Robust Kernel for Appearance-Based Learning", in *Proc. IEEE International Conference on Pattern Recognition*

- (ICPR), Tampa, Florida, USA, 2008.
6. **Liao, C.-T.** and Lai, S.-H., "A Novel Robust Kernel and Its Applications for Images", in *Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Taipei, Taiwan, 2009.
  7. **Liao, C.-T.**, Wang, Y.-L., Lai, S.-H. and Hsu, C.-T., "A Novel Color Context Descriptor and Its Applications", in *Proc. IEEE International Conference on Multimedia and Expo (ICME)*, New York, USA, 2009. **(oral paper)**
  8. **Liao, C.-T.**, Lai, S.-H., and Wang, W.-H., "A Hierarchical Image Kernel with Application to Pedestrian Identification for Video Surveillance," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Cairo, Egypt, 2009.
  9. **Liao, C.-T.**, Chuang H.-J., Duan C.-H., and Lai, S.-H., "Learning Spatial Weighting via Quadratic Programming for Facial Expression Analysis," in *Proc. 3<sup>rd</sup> IEEE CVPR Workshop for Human Communicative Behavior Analysis (CVPR4HB)*, San Francisco, CA, USA, 2010. **(oral paper)**
  10. Wang, Y.-L., **Liao, C.-T.**, Su, A. W.-Y, and Lai, S.-H., "Fingerprint Compression: An Adaptive and Fast DCT-based Approach," in *Proc. IEEE International Conference on Image Processing (ICIP)*, Hong Kong, China, 2010.
  11. **Liao, C.-T.**, Duan, C.-H., and Lai, S.-H., "Accurate Facial Feature Localization on Expressional Face Images Based on a Graphical Model Approach," in *Proc. the 2010 Pacific-Rim Conference on Multimedia (PCM)*, LNCS 6298, Shanghai, China, 2010.

### C. Local Journal Papers

1. **Liao, C.-T.**, Wang, S.-F, Lin, T.-Y., Lai, S.-H., and Wang, W.-H., "Person Identification under Multi-View Video Surveillance Environments," *Image Processing and Pattern Recognition*, Vol. 15 No. 2, 2009, pp. 71-90.

### D. Patents

1. Lai, S.-H. and **Liao, C.-T.**, *Face Recognition Method*. (United States, Pub. No. 0135541/A1, 2009/01)
2. Wang, W.-N., Lai, S.-H., **Liao, C.-T.**, Chuang, H.-J., Tsai, T.-C., and Chang F.-K., *Facial expression recognition systems and methods and computer program products thereof*. (Taiwan, No.099119644, 2010/06. PRC, No.201010269201.3, 2010/8. United States, Pending)

## 99年10月&11月 通過 學術審查

93 學年度入學 (博七)

### Journal Papers:

1. **Ming-Chao Tsai**, Ting-Chi Wang, and TingTing Hwang, “Through-Silicon Via Planning in 3D Floorplanning,” accepted to be published in *IEEE Transactions on Very Large Scale Integration Systems*.
  - **Top journal in EDA field**
  - **Chapter 3**

### Conference Papers:

1. **Ming-Chao Tsai**, Yung-Chia Lin, and Ting-Chi Wang, “An MILP-Based Wire Spreading Algorithm for PSM-Aware Layout Modification,” in *Asia and South Pacific Design Automation Conference (ASP-DAC)*, pp. 364-368, 2008.
  - **Chapter 2**
2. **Ming-Chao Tsai**, Ting-Chi Wang, and TingTing Hwang, “Through-Silicon Via Planning in 3D Fixed-Outline Floorplanning,” in *International Conference on Green Circuits and Systems (ICGCS)*, pp. 584-588, 2010.
  - **Chapter 3**
3. **Ming-Chai Tsai** and TingTing Hwang, “An Evaluation of Trade-off among Wirelength, Number of Through-Silicon Via and Placement in 3D-ICs”, submitted to *International Symposium on VLSI Design, Automation and Test (VLSI-DAT 2011)*.
  - **Chapter 4**
4. Yun-Ru Wu, **Ming-Chao Tsai**, and Ting-Chi Wang , “Maze Routing with OPC Consideration,” in *Asia and South Pacific Design Automation Conference (ASP-DAC)*, pp. 198-203, 2005.
5. Chung-Wei Lin, **Ming-Chao Tsai**, Kuang-Yao Lee, Tai-Chen Chen, Ting-Chi Wang, and Yao-Wen Chang, “Recent Research and Emerging Challenges in Physical Design for Manufacturability/Reliability,” in *Asia and South Pacific Design Automation Conference (ASP-DAC)*, pp. 238-243, 2007.

## 99年10月&11月通過學術審查

94 學年度入學 (博六)

### Journal Papers

- [1]. **Yi-Ling Chen**, Bing-Yu Chen, Shang-Hong Lai and Tomoyuki Nishita, "Binary Orientation Trees for Volume and Surface Reconstruction from Unoriented Point Clouds", *Computer Graphics Forum (Proceedings of Pacific Graphics 2010)*, vol.29, no. 7, pp2011-2019, Sep. 2010. (Acceptance rate 17%) (Impact factor: 1.681) [SCI, EI]
- [2]. **Yi-Ling Chen** and Shang-Hong Lai, "An Orientation Inference Framework for Surface Reconstruction from Unorganized Point Clouds", accepted by *IEEE Transactions on Image Processing*, Aug. 2010. (Impact factor: 2.848) [SCI, EI]
- [3]. **Yi-Ling Chen** and Shang-Hong Lai, "Creating MPU Implicit Surfaces from Unoriented Point Sets with Orientation Inference", *The Visual Computer (Proceedings of Computer Graphics International 2009)*, vol. 25, no. 5, pp 391-399, May 2009. (Impact factor: 0.786) [SCI, EI]
- [4]. Chen-Kuo Chiang, Shu-Fan Wang, **Yi-Ling Chen** and Shang-Hong Lai, "Fast JND-Based Video Carving with GPU Acceleration for Real-Time Video Retargeting", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 19, no. 11, pp 1588-1597, Nov. 2009. (Impact factor: 2.548) [SCI, EI].

### Conference Papers:

- [5]. Te-Feng Su, **Yi-Ling Chen**, and Shang-Hong Lai, "Over-Segmentation Based Background Modeling and Foreground Detection with Shadow Removal Using Hierarchical MRFs", accepted to be presented in *Asian Conference on Computer Vision (ACCV'10)*. (Acceptance rate 29.5%) (Poster)
- [6]. Shu-Fan Wang, **Yi-Ling Chen**, Chen-Kuo Chiang, Bing-Yu Chen, Shang-Hong Lai and Tomoyuki Nishita, "Content-Aware Geometry Image Resizing", In *Proceedings of Computer Graphics International 2010 (CGI'10)*, June 2010. (Short Paper)
- [7]. **Yi-Ling Chen**, Shang-Hong Lai, and Tomoyuki Nishita, "Robust Surface Reconstruction from Defective Point Clouds by Using Orientation Inference and Volumetric Regularization", In *Proceedings of Siggraph Asia 2009* (Sketch).
- [8]. Shu-Fan Wang, **Yi-Ling Chen**, Chen-Kuo Chiang and Shang-Hong Lai, "Surface Simplification by Image Retargeting", In *Proceedings of Siggraph Asia 2009* (Sketch).
- [9]. **Yi-Ling Chen** and Xiang Zhang, "A Memory Effective Two-phase Approach for Large Scanned Surface Mesh Simplification," In *Proceedings of Shape Modeling International 2008 (SMI'08)*, New York, June 2008. (Poster)
- [10]. **Yi-Ling Chen**, Shang-Hong Lai and Tung-Ying Lee, "Generalized MPU Implicits by Using Belief Propagation," In *Proceedings of 3D Digital Imaging*

*and Modeling (3DIM'07)*, Montréal, Canada, August 2007. (Oral Paper)

- [11]. **Yi-Ling Chen** and Shang-Hong Lai, "A Partition-of-Unity Based Algorithm for Implicit Surface Reconstruction Using Belief Propagation," In *Proceedings of Shape Modeling International 2007 (SMI'07)*, Lyon, France, June 2007. (Oral Paper)
- [12]. Po-Hao Huang, **Yi-Ling Chen**, Chia-Ming Cheng, Yu-An Lu, and Shang-Hong Lai, "Robust 3D object model reconstruction from video," In *Proceedings of SPIE Conference on Three-Dimensional Image Capture and Applications VI*, San Jose, California, USA, Jan. 2004.
- [13]. Shang-Hong Lai and **Yi-Ling Chen**, "Learning a statistical 3D geometric head model," In *Proceedings of SPIE Conference on Videometrics VII*, Santa Clara, California, USA, Jan. 2003.

## 99 年 10 月&11 月 通過 學術審查

95 學年度入學 (博五)

### Journal:

- [1] Huang-Chen Lee, Amit Banerjee, Yao-Min Fang, Bing-Jean Lee, Chung-Ta King, Design of a Multi-Functional Wireless Sensor for In-Situ Monitoring of Debris Flows, Accepted and to appear in *IEEE Transactions on Instrumentation and Measurement*.  
(IF=1.025, SCI, EI)
- [2] Huang-Chen Lee, Chun-Yu Lin, Chun-Han Lin, Sheng-Wen Hsu, Chung-Ta King, A Low-Cost Method for Measuring Surface Currents and Modeling Drifting Objects, Accepted and to appear in *IEEE Transactions on Instrumentation and Measurement*.  
(IF=1.025, SCI,EI)

### Conference:

- [3] Huang-Chen Lee, Chun-Yu Lin, Chuan-Yu Cho, Chen-Lung Chan, Yao-Min Fang, Bing-Jean Lee, Chung-Ta King, The Design Considerations of a Sensor Grid for Monitoring Precipitation in Debris-Flow-Prone Area. In Proceedings of the 9th ACM/IEEE Conference on Information Processing in Sensor Networks (**IPSN 2010**) Poster Session, Stockholm, Sweden, April 2010
- [4] Chun-Yu Lin, Huang-Chen Lee, Wei-Hsuan Lee, Chen-Lung Chan, Chung-Ta King, SenPro: Concurrent Wireless Sensor Network System Profiling. In *Proceedings of the 9th ACM/IEEE Conference on Information Processing in Sensor Networks (IPSN 2010)* Demo Session, Stockholm, Sweden, April 2010
- [5] Huang-Chen Lee, Chuan-Yu Cho, Yao-Ming Fang, Bing-Jean Lee, Chung-Ta King. Exploiting the Tradeoff between Fast Wakeup and Long Standby in Event-monitoring WSN. In *Proceedings of the 7th ACM Conference on Networked Embedded Sensor Systems (SenSys 2009)* Poster Session, Berkeley, CA, November 2009
- [6] Huang-Chen Lee, Chun-Yu Lin, Shang-Wen Hsu, Chung-Ta King. On Building Mobility Models for Floating Objects. In *Proceedings of the 7th ACM Conference on Networked Embedded Sensor Systems (SenSys 2009)* Poster Session, Berkeley, CA, November 2009
- [7] Huang-Chen Lee, Chuan-Yu Cho, Chung-Ta King, Yao-Min Fang, Bing-Jean Lee, Design and Implementation of Non-Autonomous Mobile Wireless Sensor for Debris Flow Monitoring. In *Proceedings of the 6th IEEE International Conference on Mobile Ad Hoc and Sensor Systems (MASS 2009)* Demo Session, Macau SAR, P.R.C, October 2009

- [8] Huang-Chen Lee, Chin-Jung Liu, Jung Yang, Jen-Tse Huang, Yao-Min Fang, Bing-Jean Lee, Chung-Ta King. Using Mobile Wireless Sensor to In-Situ Tracking of Debris Flows. *In Proceedings of the 6th ACM Conference on Networked Embedded Sensor Systems (SenSys 2008)* Poster Session, Raleigh, NC, November 2008
- [9] Chin-Jung Liu, Huang-Chen Lee, Jung Yang, Jen-Tse Huang, Yao-Min Fang, Bing-Jean Lee, Chung-Ta King. Development of a Long-Lived, Real-time Automatic Weather Station Based on WSN. *In Proceedings of the 6th ACM Conference on Networked Embedded Sensor Systems (SenSys 2008)* Poster Session, Raleigh, NC, November 2008

**Patent:**

- [10] 土石流感測器，方耀民；李秉乾；周天穎；金仲達；李皇辰；陳重宏；黃彥豪，中華民國專利證號:M367332 (98年10月21日)，