104 年 04 月　通過 學術審查

年　　級：博　七　（92 學年度入學; 修業: 11 年 7 個月）

著作列表

Journal Papers

[J1] W.-K. Hon, T. Kloks, **C.-H. Liu**, H.-H. Liu, S.-H. Poon, and Y.-L. Wang, *On Maximum Independent Set of Categorical Product and Ultimate Categorical Ratios of Graphs,* **Theoretical Computer Science (TCS)**, 22 pages, to appear (Accepted in Mar 2015).

[J2] **C.-H. Liu**, S.-H. Poon, and J.-Y. Lin, *Independent Dominating Set Problem Revisited,* **Theoretical Computer Science (TCS)**, vol. 562, pp. 1-22, (2015).

[J3] J.-R. Jiang, C.-T. King, C.-S. Liao, and **C.-H. Liu**, *MUREX: A Mutable Replica Control Scheme for Structured Peer-to-Peer Storage Systems*, **Int. Journal of Pervasive Computing and Communications (IJPCC)**, vol. 5, pp. 9-24, (2009).

Conference Papers

[C1] J.-Y. Lin, **C.-H. Liu**, and S.-H. Poon, *Algorithmic Aspect of Minus Domination on Small-Degree Graphs,* in **Int. Computing and Combinatorics Conference (COCOON)**, 12 pages, (Accepted in Apr 2015).

[C2] **C.-H. Liu** and S.-H. Poon, *Unfolding Linear Tree Linkages of Low Monotonicity (Long Abstract)*, in **Workshop on Combinatorial Mathematics and Computation Theory (WCMCT)**, 6 pages, to appear (Accepted in Apr 2015).

[C3] J.-Y. Lin, **C.-H. Liu**, and S.-H. Poon, *Algorithmic Aspect of Minus Domination on Small-Degree Graphs,* in **Annual Meeting of Asian Association for Algorithms and Computation (AAAC)**, 1 page, to appear (Accepted in Mar 2015).

[C4] **C.-H. Liu** and S.-H. Poon, *Unfolding k-Monotone Linear Trees,* in **Annual Symposium on Computational Geometry: Young Researchers Forum (SoCG:YRF)**, 2 pages (2014).

[C5] W.-K. Hon, T. Kloks, **C.-H. Liu**, H.-H. Liu, S.-H. Poon, and Y.-L. Wang, *Results on Independent Sets in Categorical Products of Graphs, the Ultimate*

Categorical Independence Ratio and the Ultimate Categorical Independent Domination Ratio, in **Int. Workshop on Algorithms and Computation (WALCOM)**, pp. 237-248, (2014).

[C6] T. Kloks, **<u>C.-H. Liu</u>**, and S.-H. Poon, *On Edge-Independent Sets*, in **Int. Frontiers of Algorithmics Workshop and Int. Conference on Algorithmic Aspects of Information and Management (FAW-AAIM)**, pp. 272-283, (2013).

[C7] B. Ballinger, D. Charlton, E. D. Demaine, M. L. Demaine, J. Iacono, **<u>C.-H. Liu</u>**, and S.-H. Poon, *Minimal Locked Trees*, in **Algorithms and Data Structures Symposium (WADS)**, pp. 61-73, (2009).

In progress of submission

The following journal papers are only submitted, not published yet:
[SJ1] T. Kloks, **<u>C.-H. Liu</u>**, and S.-H. Poon, *Algorithms and Complexity of Edge-Independent Set Problem*, submitted to **Algorithmica**, 48 pages, (Submitted in May 2014).
[SJ2] B. Ballinger, D. Charlton, E. D. Demaine, M. L. Demaine, J. Iacono, **<u>C.-H. Liu</u>**, and S.-H. Poon, *Minimal Locked Trees*, submitted to **Discrete & Computational Geometry (DCG)**, 27 pages, (Submitted in May 2014).

The following conference paper is only submitted, not published yet:
[SC1] **<u>C.-H. Liu</u>** and S.-H. Poon, *Unfolding k-Monotone Linear Trees,* submitted to **Int. Symposium on Mathematical Foundations of Computer Science (MFCS)**, 49 pages (Submitted in Apr 2015).

104 年 04 月　通過 學術審查

年　　　級：99 學年度入學，博五

著作列表

Journal Papers

1. **Tseng-Yi Chen**, Hsin-Wen Wei, Tsung-Tai Yeh, Tsan-sheng Hsu, and Wei-Kuan Shih, "An Energy-Efficient and Reliable Storage Mechanism for Data-Intensive Academic Archive Systems.", *ACM Transactions on Storage*, vol. 11, issue 2, no. 10, pp. 1-21, March 2015. (SCI)

2. Tseng-Yi Chen, Hsiu-lien Yeh, Hsin-Wen Wei, Mei-ju Sun, Tsan-sheng Hsu, and Wei-Kuan Shih, "An Effective Monitoring Framework and User Interface Design.", *Software - Practice and Experience*, vol. 45, no. 4, pp. 549-570, April 2015. (SCI)

3. Hsin-Wen Wei, **Tseng-Yi Chen**, and Tsan-sheng Hsu, "BASE: An Assistant Tool to Precisely Simulate Energy Consumption and Reliability of Energy-efficient Storage Systems.", *Software - Practice and Experience*, March 2015 (accepted) (SCI)

4. **Tseng-Yi Chen**, Hsin-Wen Wei, Che-Rung Lee, Fu-Nan Huang, Tsan-sheng Hsu, and Wei-Kuan Shih, "Energy Efficient Geographic Routing Algorithms in Wireless Sensor Network.", *Journal of Interconnection Networks*, vol. 14, no. 1, pp. 1-23, March 2013. (EI)

5. Tsung-Tai Yeh, **Tseng-Yi Chen**, Yen-Chiu Chen, and Hsin-Wen Wei, "Parallel Non-linear Dimension Reduction Algorithm on GPU.", International Journal of Granular Computing, Rough Sets and Intelligent Systems, vol. 2, no. 2, pp. 149-165, Oct. 2011.

Conference Papers

1. Shou-Han Chen, **Tseng-Yi Chen**, Yuan-Hao Chang, Hsin-Wen Wei, and Wei-Kuan Shih, "Union Page Cache for Embedded Systems with PCM-Based Storage Devices.", in the 2015 DAC Work-in-Progress Session, San Francisco, CA, USA.

2. Shou-Han Chen, **Tseng-Yi Chen**, Hsin-Wen Wei, Nai-Yuan Jhang, Tsan-sheng Hsu, and Wei-Kuan Shih, "A Study of Suitable Fault Tolerance Frameworks for an Energy-efficient Storage System.", in *the 2015 International Conference on Collaboration Technologies and Systems*, CTS 2015, Atlanta, GA, USA, June 1-5, 2015.

3. **Tseng-Yi Chen**, Shih-Wen Hsu, Han-Chieh Chao, Yung-Chun Chang, Heng-Yin Chen, Yu-Chun Cheng, and Wei-Kuan Shih, "Inspecting the Performance of Packet Schedulers over a Large-scale OpenFlow-based Network.", in *the 2015 International Conference on Collaboration Technologies and Systems*, CTS 2015 (Work-In-Progress), Atlanta, GA, USA, June 1-5, 2015.

4. **Tseng-Yi Chen,** Heng-Yin Chen, Nai-Yuan Jhang, and Wei-Kuan Shih, "A User Interactive Experience for One-handed Operation of Hand-held Devices.", in *the 2014 International Computer Symposium* (ICS 2014), Taichung, Taiwan, Dec. 12-14, 2014.

5. **Tseng-Yi Chen**, Hsin-Wen Wei, Yu-Chun Cheng, Wei-Kuan Shih, and Heng-Yin Chen, "An Efficient Routing Algorithm to Optimize the Lifetime of Sensor Network Using Wireless Charging Vehicle.", *IEEE 11th International Conference on Mobile Ad Hoc and Sensor Systems*, MASS 2014, pp. 501-502, Philadelphia, PA, USA, October 28-30, 2014.

6. **Tseng-Yi Chen**, Shuo-Han Chen, Heng-Yin Chen, and Wei-Kuan Shih, "An Enhanced User Interface Design with Auto-Adjusting Icon Placement on Foldable Devices.", in *the 2014 IEEE International Conference on Systems, Man, and Cybernetics* (SMC 2014), San Diego, CA, USA, October 5-8, 2014.

7. **Tseng-Yi Chen**, Fan-Hsun Tseng, Nen-Fu Huang, Wei-Kuan Shih, Han-Chieh Chao, and Li-Der Chou, "The Implementation of IPv6-enabled Locators for Location-based Smart Marketing Service.", in *the 10th International Conference on Intelligent Information Hiding and Multimedia Signal Processing* (IIHMSP 2014), Kitakyushu, Japan, Aug. 27-29, 2014.

8. Nien-I Hsu, **Tseng-Yi Chen**, Yuan-Hao Chang, Hsin-Wen Wei, Wei-Kuan Shih, and Norman Chang, "Dynamic tail packing to optimize space utilization of file systems in embedded computing systems.", *IEEE 20th International Conference on Embedded and Real-Time Computing Systems and Applications*, RTCSA 2014, Chongqing, China, August 20-22, 2014.

9. Yuan-Hao Chang, **Tseng-Yi Chen**, Yun-Jhu Chen, Hsin-Wen Wei, Wei-Kuan Shih, and Zhao-Rong Lai, "Optimizing space utilization of file systems on PCM-based storage devices.", in *2014 IEEE Non-Volatile Memory Systems and Applications Symposium*, NVMSA 2014, Chongqing, China, August 20-22, 2014.

10. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Ying-Jie Chen, Nia-Yuan Chang, Tsan-sheng Hsu, and Wei-Kuan Shih, "A High Efficient Disk Scheduling Framework with QoS Mechanism in Xen-Based Cloud Platforms.", in *the 14th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, CCGrid 2014, Chicago, IL, USA, May 26-29, 2014.

11. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Ying-Jie Chen, Tsan-sheng Hsu, and Wei-Kuan Shih, "BASE: Benchmark Analysis Software for Energy-efficient Solutions in Large-scale Storage Systems.", in *the 2013 IEEE International Conference on Cluster Computing*, CLUSTER 2013, Indianapolis, IN, USA, September 23-27, 2013.

12. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Ying-Jie Chen, Wei-Kuan Shih, and Tsan-sheng Hsu, "Integrating Deadline-Modification SCAN Algorithm to Xen-based Cloud Platform.", in *the 2013 IEEE International Conference on Cluster Computing*, CLUSTER 2013, Indianapolis, IN, USA, September 23-27, 2013.

13. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Nien-I Hsu, and Wei-Kuan Shih, "A IoT Application of Safe Building in IPv6 Network Environment.", in *the 37th IEEE Computer Software and Applications Conference*, COMPSAC 2013, Kyoto, Japan, July 22-26, 2013.

14. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Ming-Feng Wei, Ying-Jie Chen, Tsan-sheng Hsu, and Wei-Kuan Shih, "LaSA: A Locality-aware Scheduling Algorithm for Hadoop-MapReduce Resource Assignment.", in *the 2013 International Conference on Collaboration Technologies and Systems*, CTS 2013, San Diego, CA, USA, May 20-24, 2013.

15. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Che-Rung Lee, Fu-Nan Huang, Tsan-sheng Hsu, and Wei-Kuan Shih, "EEGRA: Energy Efficient Geographic Routing Algorithms for Wireless Sensor Network.", in *the 2012 International Symposium on Pervasive Systems, Algorithms, and Networks*, ISPAN 2012, San Marcos, TX, USA, Dec. 13 - 15, 2012.

16. **<u>Tseng-Yi Chen</u>**, Tsung Tai Yeh, Hsin-Wen Wei, Yu-Xun Fang, Wei-Kuan Shih, and Tsan-sheng Hsu, "CacheRAID: An Efficient Adaptive Write Cache Policy to Conserve RAID Disk Array Energy.", in *the 5th IEEE/ACM International Conference on Utility and Cloud Computing*, UCC 2012, Chicago, IL, USA, Nov. 5-8, 2012.

17. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Jenq-Shiou Leu, and Wei-Kuan Shih, "EDZL Scheduling for Large-scale Cyber Service on Real-time Cloud.", in *the 4th IEEE International Conference on Service-Oriented Computing and Applications,* SOCA 2011, Irvine, CA, USA, December 12-14, 2011.

18. Tsung Tai Yeh, **<u>Tseng-Yi Chen</u>**, Yen-Chiu Chen, and Wei-Kuan Shih, "Efficient Parallel Algorithm for Nonlinear Dimensionality Reduction on GPU.", in *the 6th IEEE International Conference on Granular Computing*, GrC 2010, San Jose, CA, USA, Aug. 14-16, 2010.

In progress of submission

1. Hsiu-lien Yeh, **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Nien-I Hsu, Jenq-Shiou Leu, and Heng-Yin Chen, "CloudBook: Implementing an E-Book Reader on a Cloud Platform by an Optimized Vector Graphic Library." submitted to *Computer Standard & Interfaces* (CSI). (SCI) (Revision)

2. **<u>Tseng-Yi Chen</u>**, Yuan-Hao Chang, Ming-Chang Yang, Yun-Jhu Chen, Hsin-Wen Wei, and Wei-Kuan Shih, "Optimizing Space Utilization of File Systems on PCM-based Storage Devices" submitted to IEEE Transactions on Computers (TC). (Major Revision)

3. **<u>Tseng-Yi Chen</u>**, Yuan-Hao Chang, Nien-I Hsu, Hsin-Wen Wei, and Wei-Kuan Shih, "On Space Utilization Enhancement of File Systems for Embedded Storage Systems" submitted to ACM Transactions on Design Automation of Electronic Systems (TODAES). (Under Review.)

Conference

4. Shou-Han Chen, **<u>Tseng-Yi Chen</u>**, Yu-Chun Cheng, Hsin-Wen Wei, Tsan-sheng Hsu, and Wei-Kuan Shih, "Developing a User-friendly Sensor Network Simulator to Imitate Wireless Charging Vehicle Behaviors." submitted to *the IEEE 82nd Vehicular Technology Conference: VTC2015-Fall*.

5. **<u>Tseng-Yi Chen</u>**, Hsin-Wen Wei, Nai-Yuan Jhang, Shou-Han Chen, Tsan-sheng Hsu, and Wei-Kuan Shih, "A QoS-aware Data Reconstruction Strategy within an Energy-efficient Erasure Codes Framework." submitted to *the 2015 IEEE International Conference on Cluster Computing*.