

98 年 12 月 通過 學術審查

91 學年度入學(博七)

Journal Papers

1. **Li-Ya Tseng**, Yeh-Hao Chin, Shu-Ching Wang, “A minimized makespan scheduler with multiple factors for Grid computing systems,” *Expert Systems with Applications*, vol. 36, no.8, pp. 11118-11130, 2009.
[SCI, EI, Impact factor: 2.596]
2. **L. Y. Tseng**, Y. H. Chin, S. C. Wang, “The anatomy study of high performance task scheduling algorithm for Grid computing system,” *Computer Standards & Interfaces*, vol. 31, no.4, pp. 713-722, 2009.
[SCI, EI, Impact factor: 1.074]
3. **Li-Ya Tseng**, Yeh-Hao Chin, Shu-Ching Wang, “A Deadline-based Task Scheduling with Minimized Makespan,” *International Journal of Innovative Computing, Information and Control*, vol.5, no.6, pp. 1165-1679, June 2009.
[SCI, EI, Impact factor: 2.791]
4. **Li-Ya Tseng**, Yeh-Hao Chin, Shu-Ching Wang, “Deadline-based Scheduling for Grid Computing,” submitted to *Information Sciences*.
5. **Li-Ya Tseng**, Yeh-Hao Chin, Shu-Ching Wang, “A New Territory of the Performance Scheduling Frame with Minimized Makespan,” submitted to *IEEE Transactions on Systems, Man and Cybernetics - Part A: Systems and Humans*.

Conference Papers

1. S. C. Wang, K. Q. Yan, C. P. Chang, **L. Y. Tseng**, “The Anatomy Study of Load Balancing in Distributed System,” *Proceeding of 7th International Conference on Parallel and Distributed Computing, Applications and Technologies*, Taipei, Taiwan, pp. 460-463, 4-7 December 2006. (IEEE, EI)
2. S. C. Wang, K. Q. Yan, C. P. Chang, **L. Y. Tsenge**, “Towards Efficient Load Balancing in Grid Computing,” *Proceeding of Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems*, SCIS & ISIS 2006, Tokyo Japan, pp.2107-2112, 20-24 September 2006.

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92 學年入學 (博七)

Journal Papers:

1. **Edward T.-H. Chu**, Tai-Yi Huang, Yu-Che Tsai, “An Optimal Solution for the Heterogeneous Multi-processor Single-level Voltage Setup Problem”, *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. 28, No. 11, pp1705-1718, 2009. (SCI, EI, 2008 IF=1.466).
2. **Edward T.-H. Chu**, Tai-Yi Huang, Cheng-Han Tsai, Jian-Jia Chen and Tei-Wei Kuo, “A DVS-assisted Dynamic Power Management for Hard Real-Time Monitoring Systems”, *Journal of Real-Time Systems*, Vol. 4, No. 3, pp222-255, 2009. (SCI, EI, 2008 IF=1.145).
3. Cheng-Han Tsai, Tai-Yi Huang, **Edward T.-H. Chu**, Chun-Hang Wei, and Yu-Che Tsai, “An Efficient Real-time Disk-scheduling Framework using Imprecise Computation”, *IEEE Transactions on Computers*, Vol.57, No. 5, pp634-647, 2008. (SCI, EI, 2008 IF=2.611).
4. **Edward T.-H. Chu**, Hsin-Ju Lee, Tai-Yi Huang, and Chung-Ta King, “Sample Assignment for Ensuring Sensing Quality and Energy Efficiency in Wireless Sensor Networks”, submit to *IEEE Transactions on Parallel and Distributed Systems*. August, 2009. (under major revision)

Conference Papers:

1. Tai-Yi Huang, Yu-Che Tsai and **Edward T.-H. Chu**, “A Near-optimal Solution for the Heterogeneous Multi-processor Single-level Voltage Setup Problem”, In *the 21st IEEE International Parallel and Distributed Processing Symposium (IPDPS)*, March, 2007. (Acceptance rate: 26%)
2. Tai-Yi Huang, Kai-Yuan Hou, Huang-Yi Yu, **Edward T.-H. Chu** and Chung-Ta King, “LA-TinyOS: A Locality-aware Operating System for Wireless Sensor Networks”, In *the 22nd Annual ACM Symposium on Applied Computing (SAC)*, March, 2007. (Acceptance rate: 32%)

3. **Edward T.-H. Chu**, Tai-Yi Huang, “A New Guideline for Designing Low-Power Real-Time Systems”, In *the ACM Conference on Languages, Compilers, and Tools for Embedded Systems (LCTES)*, Poster Section, Ottawa, Canada, June, 2006.
4. Cheng-Han Tsai, **Edward T.-H. Chu**, and Tai-Yi Huang, “WRR-SCAN: A Rate-Based Real-Time Disk-Scheduling Algorithm”, In *the 4th ACM International Conference on Embedded Software (EMSOFT)*, September, 2004. (Acceptance rate: 36%)

Book Chapter:

1. Tai-Yi Huang, Shiao-Li Tsao, Le-Chun Wu, **Edward T.-H. Chu**, and Ko-Yun Liu, “Chapter 5: Embedded Software”, *Essential Issues in SOC Design*, Springer-Verlag, 2006.

Patent:

1. **朱宗賢**，余皇億，江柏穠，黃泰一，沈仲九, "無線感測網路及其取樣頻率設定方法", 已通過工研院專利委員會審查, 委由工研院申請美國與中華民國專利, 2008.

98 年 12 月 通過 學術審查

92 學年度入學 (博七)

Journal Papers

1. H.-M. Sun, **Chien-Ming Chen**, and C.-Z. Shieh, “Flexible-Pay-Per-Channel: A New Model for Content Access Control in Pay-TV Broadcasting Systems,” *IEEE Transactions on Multimedia*, vol. 10, issue. 6, Page(s): 1109–1120, Oct. 2008. **(EI; SCI, Impact Factor: 2.288)**
2. H.-M. Sun, K.-H. Wang, and **Chien-Ming Chen**, “On the Security of an Efficient Time-Bound Hierarchical Key Management Scheme,” *IEEE Transactions on Dependable and Secure Computing*, vol. 6, no. 2, page(s): 159–160, April-June 2009.

Conference Papers

1. H.-M. Sun, Y.-K. Peng, and **Chien-Ming Chen**, “A Robust IP Packets Filtering Mechanism to Protect Servers from DDoS Attacks,” In *Proceedings of the 15th Information Security Conference*, Taiwan, pp.299–306, 2005.
2. H.-M. Sun, C.-F. Hung, and **Chien-Ming Chen**, “An Improved Digital Rights Management System Based on Smart Cards,” In *Proceedings of 2007 Inaugural IEEE International Conference on Digital Ecosystems and Technologies (IEEE DEST 2007)*, Page(s):308 – 313, Feb. 2007.
3. H.-M. Sun, **Chien-Ming Chen**, and F.-Y. Chu, “An Efficient and Scalable Key Management Protocol for Secure Group Communications in Wireless Sensor Networks,” In *proceedings of the 12th IEEE Symposium on Computers and Communications (IEEE ISCC 2007)*, Page(s):495 – 500, July 2007.
4. H.-M. Sun, S.-P. Hsu, and **Chien-Ming Chen**, “Mobile Jamming Attack and its Countermeasure in Wireless Sensor Networks,” In *proceedings of the 21th IEEE International Conference on Advanced Information Networking and Applications Workshops (IEEE AINAW 2007)*, Page(s):457 – 462, May 2007.
5. H.-M. Sun, **Chien-Ming Chen**, and Y.-C. Hsiao, “An Efficient Countermeasure to the Selective Forwarding Attack in Wireless Sensor Networks,” In *Proceedings of the IEEE Region 10 Conference (IEEE TENCON 2007)*, Page(s):1 – 4, Oct. 2007.

6. H.-M. Sun, Y.-H. Lin, Y.-C. Hsiao, and **Chien-Ming Chen**, “An Efficient and Verifiable Concealed Data Aggregation Scheme in Wireless Sensor Networks,” In *Proceedings of IEEE International Conference on Embedded Software and Systems (IEEE ICES 2008)*, Page(s):19 – 26, July 2008.

Submitted Papers:

1. H.-M. Sun, **Chien-Ming Chen**, Y.-H. Lin, and Y.-C. Hsiao, “RCDA: Recoverable Concealed Data Aggregation for Data Integrity in Wireless Sensor Networks ,” submitted to *IEEE Transactions on Parallel and Distributed Systems* (**under revision**).
2. H.-M. Sun, **Chien-Ming Chen**, and Y.-H. Lin, “A Complete and Efficient Hierarchical Key Management Construction for Heterogeneous Cluster-based Wireless Sensor Networks,” submitted to *IEEE Transactions on Mobile Computing*.
3. H.-M. Sun, Y.-H. Lin, **Chien-Ming Chen**, and C.-H. Wang, “SASHIMI: Secure Aggregation via Successively Hierarchical Inspecting of Messages Integrity on WSNs,” submitted to *IEEE Transactions Dependable and Secure Computing*.
4. H.-M. Sun, H. Wang, K.-H. Wang, and **Chien-Ming Chen**, “A Native APIs Protection Mechanism in the Kernel Mode against Malicious Codes,” submitted to *IEEE Transactions on Computers*.

Patents:

孫宏民, 徐士卜, **陳建銘**, 「 Mobile Jamming Attack and its Countermeasure in Wireless Sensor Networks,」 台灣、美國專利, 已送審, 2007.

98 年 12 月 通過 學術審查

92 學年度入學，93 學年度直升（博六）

Journal Papers

1. Hung-Min Sun, **King-Hang Wang**, Wei-Chi Ting, “On the Security of Secure Arithmetic Code,” Information Forensics and Security, IEEE Transactions on , vol.4, no.4, pp.781-789, Dec. 2009. (Regular paper)
2. Hung-Min Sun, **King-Hang Wang**, Chien-Ming Chen, “On the Security of an Efficient Time-Bound Hierarchical Key Management Scheme,” Dependable and Secure Computing, IEEE Transactions on , vol.6, no.2, pp.159-160, April-June 2009 (Comment paper, an longer Tech-report with formal proof is also available on web.)
3. Hung-Min Sun, Wei-Chi Ting, **King-Hang Wang**, “On the security of Chien’s ultra-lightweight RFID authentication protocol,” To be appear, IEEE Transactions of Dependable and Secure Computing (Short paper, PrePrint, 7 NSC)

Others:

- Hung-Min Sun, **King-Hang Wang**, “A Transitive Human-Verifiable Authentication Protocol,” submitted to IEEE Transactions of Dependable and Secure Computing (Regular paper, major revision submitted on Nov 2009.)
- Hung-Min Sun, **King-Hang Wang**, “Two Steganographic Schemes Resisting Histogram Analysis,” submitted to Image Science Journal on Nov 2008 (under review)
- Hung-Min Sun, Mao-Yuan Chin, **King-Hang Wang**, Yue-Hsun Lin, “An Efficient Algorithm for Weil/Tate Pairing in Radix 5 Representation,” submitted to Theoretical Computer Science on Oct 2009. (under review)
- Hung-Min Sun, **King-Hang Wang**, “ACE: Arithmetic Code for Encryption,” submitted to IEEE Transactions on Information Forensics and Security on Oct 2009. (under review)
- Yue-Hsun Lin, Ahren Studer, Yao-Hsin Chen, Hsu-Chun Hsiao, Li-Hsiang Kuo, Jonathan McCune, **King-Hang Wang**, Adrian Perrig, Bo-Yin Yang, Hung-Min Sun, “SPATE: Small-group PKI-less Authenticated Trust Establishment,” submitted to IEEE Transactions on Mobile Computing on Oct 2009. (under review)
- Hung-Min Sun, Hsun Wang, **King-Hang Wang**, Chien-Ming Chen, “A Native APIs Protection Mechanism in the Kernel Mode against Malicious Codes,” submitted to IEEE Transactions on Computers on Dec 2009.

Conference Papers

Highlights:

1. Yueh-Hsun Lin, Ahren Studer, Hsu-Chun Hsiao, Jonathan M. McCune, **King-Hang Wang**, Krohn Maxwell, Phan-Lan Lin, Adrian Perrig, Hung-Min Sun, Bo-Yin Yang, “SPATE: small-group PKI-less authenticated trust establishment,” Proceedings of the 7th international conference on Mobile systems, applications, and services (Mobisys 2009), pp. 1--14, 2009 (Best paper award, accept rate 26/128, 1 NSC)
2. Hsu-Chun Hsiao, Yue-Hsun Lin, Ahren Studer, Cassandra Studer, **King-Hang Wang**, Adrian Perrig, Hung-Min Sun, Bo-Yin Yang, Hiroaki Kikuchi, “A Study of User-Friendly Hash Comparison Schemes,” Proceedings of the 25th Annual Computer Security Applications Conference (ACSAC 2009, accept rate < 44/ 220).

Others:

1. Hung-Min Sun, **King-Hang Wang**, “Designing an Arithmetic Code for Multimedia Files Compression and Encryption,” To be appear in IEEE Second International Workshop on Computer Science and Engineering (WCSE 2009, acceptance rate = 50%, EI index)
2. Hung-Min Sun, **King-Hang Wang**, “Defending Secret-Key Based Authentication Protocols against the Stolen-Secret Attack,” International Symposium on Electronic Commerce and Security, pp. 385--389, 2008 (acceptance rate = 33% EI index)
3. Hung-Min Sun, Chih-Chien Chu, **King-Hang Wang**, “An Energy-Efficient Secure Routing for Wireless Sensor Networks,” The 3rd Joint Workshop on Information Security (JWIS 2008)
4. Hung-Min Sun, Bing-Zhe He, **King-Hang Wang**, “On the Security of Vyas et al.'s RFID Authentication Protocol,” The 3rd Joint Workshop on Information Security (JWIS 2008)
5. Hung-Min Sun, Chih-Cheng Liang, **King-Hang Wang**, “RS Steganalysis over VQ Steganography,” Chinese Information Security Conference 2008
6. Hung-Min Sun, **King-Hang Wang**, Chih-Cheng Liang, Yih-Sien Kao, “A LSB substitution compatible steganography,” IEEE TENCON Region 10 Conference, 2007 (2 NSC)
7. Hung-Min Sun, **King-Hang Wang**, Kebbeh, P.S, “Distributed authorization and authentication framework for a grid infrastructure,” IEEE TENCON Region 10 Conference, 2007
8. Hung-Min Sun, Yao-Hsin Chen, **King-Hang Wang**, “An Image Data Hiding Scheme being Perfectly Imperceptible to Histogram Attacks,” Image and Vision Computing New Zealand IVCNZ, 2006 (acceptance rate~ 50-60%)
9. Hung-Min Sun, **King-Hang Wang**, Hou-Wen Wang, Chia-Yen Chen, “VQ-Based Data Hiding in Images by Minimum Spanning Tree,” Image and Vision Computing New Zealand IVCNZ, 2006 (acceptance rate~ 50-60%)
10. Hung-Min Sun, King-Hang Wang, Chi-Fu Hung, “Towards privacy preserving digital rights management using oblivious transfer,” 第五屆數位典藏技術研討會 2006 (1 NSC)
11. Hung-Min Sun, **King-Hang Wang**, Yih-Sien Kao, “IP-Based DRM-A Fair and Privacy Preserving DRM Framework,” International Computer Symposium, 2006 (1 NSC)
12. Hung-Min Sun, **King-Hang Wang**, Shih-Ying Chang, Li Wan, “An Authentication Protocol Combining Deniability and Forward Secrecy for Resisting Adaptive Attacks,” International Computer Symposium, 2006 (1 NSC)
13. Hung-Min Sun, Kai-Cheng Yang, **King-Hang Wang**, “Transferable DRM System for Two New Business Models,” Information Security Conference, 2005

Patents:

1. 高億憲, 呂沐錡, 孫宏民, 王景行, 「A DRM Key Management System using Multi-Dimensional Grouping Techniques,」 EPC, US, ROC, 審查中, 2008。
2. 王景行, 陳錦德, 孫宏民, 高億憲, 「A Key Management Scheme that Supports Users Auto-Deactivation,」 EPC, US, ROC, 審查中, 2008。
3. 王景行, 趙永軒, 孫宏民, 高億憲, 吳宛珊, 「User Group Assignment Techniques for Efficient Key Management,」 US, ROC, 審查中, 2008。

98年12月 不通過 學術審查

90 學年度入學 (博七)

Journal Paper

1. A君, 共同作者 and 共同作者, “A Parallel and Incremental Algorithm for Efficient Unique Signature Discovery on DNA Databases,” submitted to *BMC Bioinformatics* (SCI 2008 Impact Factor = **3.78, 3/29**).
2. 共同作者, 共同作者, and A君, “A Scalable Pattern Matching Algorithm for Intrusion Detection System,” submitted to *IEEE/ACM Transactions on Networking*. (EI, SCI 5-Year Impact Factor = **4.818**)
3. 共同作者, 共同作者, and A君, “In-depth Packet Inspection Using a Hierarchical Pattern Matching Algorithm,” *IEEE Transactions on Dependable and Secure Computing*, Oct. 2008. (EI, SCI 5-Year Impact Factor=**1.915, 14/84**)
4. 共同作者, 共同作者, and A君, “A Hierarchical Multi-pattern Matching Algorithm for Network Content Inspection,” *Information Sciences*, Mar. 2008. (EI, SCI (2008 Impact Factor = **2.147**))
5. A君, 共同作者, 共同作者 and 共同作者, “Finding Homologous Sequences in Genomic Databases,” *Journal of Computers*, Special issue on Bioinformatics and Computational Biology, 2007.

Conference Paper

1. A君, 共同作者 and 共同作者, “An Incremental Algorithm for Efficient Unique Signature Discoveries on DNS Databases,” to appear in the *Proceedings of the 25th ACM Symposium on Applied Computing (SAC 2010)*. (EI)
2. 共同作者, 共同作者, and A君, “A Time and Memory Efficient String Matching Algorithm for Intrusion Detection Systems,” *Proceedings of IEEE Global Telecommunications Conference (IEEE GLOBECOM'06)*, San Francisco, USA, 2006, (EI)
3. 共同作者, 共同作者, and A君, “A Novel Hierarchical Matching Algorithm for Intrusion Detection Systems,” *Proceedings of IEEE Global Telecommunications Conference (IEEE GLOBECOM'05)*, St. Louis, Missouri, USA, 2005 (EI)
4. A君, 共同作者, 共同作者, 共同作者 and 共同作者. “Efficient Discovery of Unique Signatures on Whole-genome EST Databases,” *Proceedings of the 20th ACM Symposium on Applied Computing (SAC 2005)* (EI) (Acceptance rate: **35%**)

5. A君, 共同作者, 共同作者, 共同作者and共同作者, “A Seriate Coverage Filtration Approach for Homology Search,” *Proceedings of the 19th ACM Symposium on Applied Computing (SAC 2004)* (EI)
6. A君, 共同作者, 共同作者, 共同作者and共同作者, “An Efficient Algorithm for Unique Signature Discovery on Whole-Genome EST Databases,” *Proceedings of the 3rd IEEE Computational Systems Bioinformatics Conference (CSB2004)* (EI)
7. A君, 共同作者, 共同作者, 共同作者and共同作者, “An IDC-based Algorithm for Efficient Homology Filtration with Guaranteed Seriate Coverage,” *Proceedings of the IEEE Fourth Symposium on Bioinformatics and Bioengineering (BIBE2004)*, 2004. (EI)
8. A君, 共同作者, 共同作者, 共同作者and共同作者, “A Novel Approach for Efficient Query of Single Nucleotide Variation in DNA Databases,” *The Eighth Annual International Conference on Research in Computational Molecular Biology (RECOMB 2004)*, Poster, San Diego, 2004. (EI)

國科會計畫

A君(計畫主持人), “盲用自動物品辨識系統”, 國科會研究計畫, 初審通過。