

99 年 12 月 通過 學術審查

92 上碩士班入學，93 上直升博士班 (博七)

Journal Papers:

1. **Wei-Chieh Ke**, Bing-Hong Liu, and Ming-Jer Tsai, "Efficient algorithm for constructing minimum size wireless sensor networks to fully cover critical square grids," *IEEE Transactions on Wireless Communications*, accepted
2. **Wei-Chieh Ke**, Bing-Hong Liu, and Ming-Jer Tsai, "The critical-square-grid coverage problem in wireless sensor networks is NP-complete," *Computer Networks*, major revision
3. Bing-Hong Liu, **Wei-Chieh Ke**, Chin-Hsien Tsai, and Ming-Jer Tsai, "Constructing a message-pruning tree with minimum cost for tracking moving objects in wireless sensor networks is NP-complete and an enhanced data aggregation structure," *IEEE Transactions on Computers*, vol. 57, no. 6, pp. 849-863, 2008. (SCI, EI)
4. **Wei-Chieh Ke**, Bing-Hong Liu, and Ming-Jer Tsai, "Constructing a wireless sensor network to fully cover critical grids by deploying minimum sensors on grid points is NP-complete," *IEEE Transactions on Computers*, vol. 56, no. 5, pp. 710-715, 2007. (SCI, EI)
5. **Wei-Chieh Ke**, Ying-Chin Chao, and Ming-Jer Tsai, "Deployment method for wireless sensor networks on weighted fields," *WSEAS Transactions on Computers*, vol. 5, no.6, pp. 1136-1142, 2006 (EI)
6. Bing-Hong Liu, **Wei-Chieh Ke**, and Ming-Jer Tsai, "Distributed formation of core-based forwarding multicast trees in mobile ad hoc networks," *Telecommunication Systems*, vol. 32, no. 4, pp. 263-281, 2006. (SCI, EI)

Conference Paper:

1. Bing-Hong Liu, Ming-Jer Tsai, and **Wei-Chieh Ke**, "Dynamical construction of a core-based group-shared multicast tree in mobile ad hoc networks," in *Proceedings of the IEEE 19th International Conference on Advanced Information Networking and Applications (AINA 2005)*, 2005, pp. 90-95.

Technical Report:

1. **Wei-Chieh Ke**, Bing-Hong Liu, and Ming-Jer Tsai, "Constructing a wireless sensor network to fully cover critical grids of squares by deploying minimum sensors on grid points is NP-complete," *Technical Report NTHU_CS_DC081906*, 2006

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Journal Papers:

1. **Chao-Ling Hsu** and Jyh-Shing Roger Jang, "On the Improvement of Singing Voice Separation for Monaural Recordings Using the MIR-1K Dataset," IEEE Trans. Audio, Speech, and Language Processing, volume 18, issue 2, p.p 310-319, 2010.
2. **Chao-Ling Hsu**, DeLiang Wang, and Jyh-Shing Roger Jang, "A Tandem Algorithm for Singing Pitch Extraction and Voice Separation from Music Accompaniment," submitted to IEEE Trans. Audio, Speech, and Language Processing.

Conference Papers:

1. **Chao-Ling Hsu**, DeLiang Wang, and Jyh-Shing Roger Jang, "A Trend Estimation Algorithm for Singing Pitch Detection in Musical Recordings," submitted to IEEE International Conference on Acoustics, Speech and Signal Processing.
2. **Chao-Ling Hsu** and Jyh-Shing Roger Jang, "Singing Pitch Extraction by Voice Vibrato/Tremolo Estimation and Instrument Partial Deletion", International Society for Music Information Retrieval, Utrecht, Netherlands, Aug. 2010.
3. **Chao-Ling Hsu** and Jyh-Shing Roger Jang, "Singing Pitch Extraction at MIREX 2010", extended abstract in International Society for Music Information Retrieval, Utrecht, Netherlands, Aug. 2010. (Rank 1st for vocal songs in audio melody extraction competition)
4. Chao-Ling Hsu, Liang-Yu Chen, Jyh-Shing Roger Jang, and Hsing-Ji Li, " Singing Pitch Extraction From Monaural Polyphonic Songs By Contextual Audio Modeling and Singing Harmonic Enhancement", International Society for Music Information Retrieval, Kobe, Japan, Oct. 2009.
4. **Chao-Ling Hsu**, Liang-Yu Chen, and Jyh-Shing Roger Jang, "Singing Pitch Extraction at MIREX 2009", extended abstract in International Society for Music Information Retrieval, Kobe, Japan, Oct. 2009.
5. **Chao-Ling Hsu**, Jyh-Shing Roger Jang, and Te-Lu Tsai, "Separation of Singing Voice from Music Accompaniment with Unvoiced Sounds Reconstruction for Monaural Recordings", Proceedings of 125th AES Convention, San Francisco, USA, Oct. 2008.

6. J.-S. Roger Jang, Nien-Jung Lee, and **Chao-Ling Hsu**, "Simple But Effective Methods for QBSH at MIREX 2006", extended abstract in International Symposium on Music Information Retrieval 2006, Victoria, Canada, Oct. 2006.
7. Ruo-Han Chen, **Chao-Ling Hsu**, J.-S. Roger Jang, Fong-Jhu Luo, "Content-based Music Emotion Recognition ", Workshop on Computer Music and Audio Technology, Taipei, Taiwan, March 2006.
8. J.-S. Roger Jang, **Chao-Ling Hsu**, Hong-Ru Lee, "Continuous HMM and Its Enhancement for Singing/Humming Query Retrieval", International Symposium on Music Information Retrieval 2005, London, UK, Sept 2005.
9. **Chao-Ling Hsu**, Hong-Ru Lee, J.-S. Roger Jang, "On the Improvement and Error Analysis of Singing/Humming Query Retrieval", Workshop on Computer Music and Audio Technology, Taipei, Taiwan, March 2005.
10. Hong-Ru Lee, **Chao-Ling Hsu**, Yi-Cin Wang, J.-S. Roger Jang, " Multi-modal Music Retrieval System", Conference on Digital Archive Technology, Taipei, Taiwan, 2004.

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期刊論文(Journal Papers)

- [J1] **C. J. Hsu** and C. Y. Huang, "An Adaptive Reliability Analysis Using Path Testing for Complex Component-Based Software Systems," *IEEE Transactions on Reliability*, accepted for publication, 2011. (SCI, 2009 Impact factor: 1.331, EI) 【the best journal in reliability engineering research field】
- [J2] **C. J. Hsu**, C. Y. Huang, and J. R. Chang, "Enhancing Software Reliability Modeling and Prediction through the Introduction of Time-Variant Fault Reduction Factor," *Applied Mathematical Modelling*, Vol. 35, Issue 1, pp. 506-521, Jan. 2011. (SCI, 2009 Impact factor: 1.375, EI)
- [J3] **C. J. Hsu** and C. Y. Huang, "Comparison of Weighted Grey Relational Analysis for Software Effort Estimation," *Software Quality Journal*, Vol. 19, Issue 1, pp. 165-200, Mar. 2011. (SCI, 2009 Impact factor: 0.977, EI)
- [J4] J. R. Chang, C. Y. Huang, **C. J. Hsu**, and T. H. Tsai, "Comparative Performance Evaluation of Applying Extended PIE Technique to Accelerate Software Testability Analysis," *International Journal of Systems Science*, under minor revision, 2010. (SCI, 2009 Impact factor: 0.918, EI)
- [J5] **C. J. Hsu** and C. Y. Huang, "Analysis of Applying Enhanced Genetic Algorithms to Optimize Weighted Combinations of Software Reliability Models," submitted to *IEEE Transactions on Evolutionary Computation*, under review, Jun. 2010. (SCI, 2009 Impact factor: 4.589, EI)

國際會議論文(International Conference Papers)

- [C1] **C. J. Hsu** and C. Y. Huang, "Reliability Analysis Using Weighted Combinational Models for Web-based Software," *CD-ROM Proceedings of the 18th International World Wide Web Conference (WWW 2009)*, pp. 1131-1132, Madrid, Spain, April 2009. (EI, Acceptance rate: 197/1105 = 17.8%)
- [C2] **C. J. Hsu** and C. Y. Huang, "A Study on the Applicability of Modified Genetic Algorithms for the Parameter Estimation of Software Reliability

Modeling,” *Proceedings of the 34th Annual IEEE International Computer Software and Applications Conference (COMPSAC 2010)*, pp. 531-540, Seoul, South Korea, July 2010. (EI, INSPEC, Acceptance rate: 39/193 = 20.2%)

- [C3] **C. J. Hsu**, C. Y. Huang, and T. Y. Chen, “A Modified Genetic Algorithm for Parameter Estimation of Software Reliability Growth Models,” *Proceedings of the 19th IEEE International Symposium on Software Reliability Engineering (ISSRE 2008)*, pp. 281-282, Seattle, Washington, Nov. 2008. (EI, Acceptance rate < 25%)
- [C4] **C. J. Hsu** and C. Y. Huang, “Improving Effort Estimation Accuracy by Weighted Grey Relational Analysis During Software Development Process,” *Proceedings of the 14th Asia-Pacific Software Engineering Conference (APSEC 2007)*, pp. 534-541, Nagoya, Japan, Dec. 2007. (EI, Acceptance rate: 67/214 = 31.3%)
- [C5] C. Y. Huang, T. Y. Hung, and **C. J. Hsu**, “Software Reliability Prediction and Analysis Using Queueing Models with Multiple Change-Points,” *Proceedings of the Third IEEE International Conference on Secure Software Integration and Reliability Improvement (SSIRI 2009)*, pp. 206-215, Shanghai, China, July 2009. (EI, Acceptance rate < 25%)
- [C6] **C. J. Hsu** and C. Y. Huang, “Integrating Path Testing with Software Reliability Estimation Using Control Flow Graph,” *Proceedings of the 4th IEEE International Conference on Management of Innovation & Technology (ICMIT 2008)*, pp. 1234-1239, Bangkok, Thailand, Sept. 2008. (EI)
- [C7] **C. J. Hsu** and C. Y. Huang, “Comparison and Assessment of Improved Grey Relation Analysis for Software Development Effort Estimation,” *Proceedings of the 3rd IEEE International Conference on Management of Innovation and Technology (ICMIT 2006)*, pp. 663-667, June 2006, Singapore. (EI)
- [C8] **C. J. Hsu**, N. U. Rodas, C. Y. Huang, and K. L. Peng, “A Study of Improving the Accuracy of Software Effort Estimation Using Linearly Weighted Combinations,” *Proceedings of the 3rd IEEE International Workshop on Barriers towards Internet-Driven Information Services (BINDIS 2010)*, pp. 98-103, Seoul, South Korea, July 2010. (EI, INSPEC)
- [C9] **C. J. Hsu**, C. Y. Huang, and T. Y. Hung, “A Study of Applying Grey Relational Analysis to Software Effort Estimation,” *CD-ROM Proceedings of the 36th International Conference on Computers and Industrial Engineering (ICCIE 2006)*, June 2006, Taipei, Taiwan.

國內會議論文(Domestic Conference Paper)

- [C10] 張永欣, 許兆榕, 江通儒, 林岳勳, 林楚迪, 黃慶育, “應用BizTalk平台於資訊安全電子化文件管理系統設計之個案研究(A Case Study of Applying BizTalk Server to the Design of Information Security e-Document Management System),” *Proceedings of 2007 International Conference on Advanced Information Technologies (AIT 2007)*, Taichung, Taiwan.
- [C11] 許兆榕、黃世禎、李國光, 「多因子資料分群對軟體工作量預估值精確性之影響」, 第十六屆國際資訊管理學術研討會, 中華民國資訊管理學會主辦, 臺灣台北, 民國 94 年 5 月。
- [C12] 胡衣臨、許兆榕、黃世禎, 「軟體功能點數計算精確度的影響因素與提昇之研究」, 第十六屆國際資訊管理學術研討會, 中華民國資訊管理學會主辦, 臺灣台北, 民國 94 年 5 月。
- [C13] 許兆榕、胡衣臨、黃世禎, 「應用目標導向建立專案管理指標流程之研究」, 2005 資訊管理技術與實務應用發展專題研討會, 臺灣台北, 民國 94 年 6 月。
- [C14] 許兆榕、胡衣臨、黃世禎, 「結合功能點分析與度量指標之自動化工具」, 第一屆台灣軟體工程研討會, 教育部軟體工程聯盟計畫中心主辦, 臺灣台北, 民國 94 年 6 月。

技術報告(Technical Report)

- [T1] 黃世禎、胡衣臨、許兆榕, 『如何計算軟體系統功能性的點數』, 軟體產業通訊, 第 59 期, 45-63 頁, 經濟部工業局, 民國 93 年 12 月。

專利(Patent)

- [P1] Chin-Yu Huang and Chao-Jung Hsu, “Method For Estimating Software Development Effort,” US Patent, Publication No.: US-2009-0177447-A1, Publication Date: 07/09/2009.