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### Education

- Ph.D. in Information Management. National Sun Yat- Sen University.
- Master in Information Management. National Chiao Tung University.
- Bachelor in Information Science. National Chiao Tung University.

### Area of Specialty

Data Mining, Text Mining, Medical Informatics, Information Management.

### Academic Experience

- Professor, Chairman of Department of Business Administration Southern Taiwan University of Science and Technology, 2010.03 to present
- Associate Professor, Department of Business Administration, Southern Taiwan University of Science and Technology, 2004.07 to 2010.02
- Assistant Professor, Department of Business Administration, Southern Taiwan University of Science and Technology, 2003.08 to 2004.06
- Lecturer, Department of Business Administration, Southern Taiwan University of Science and Technology, 1995/08 to 2003.07

### Publications

#### **Journal Papers:**

1. T. H. Cheng and P. J. Hu, "A Data-Driven Approach to Manage the Length of Stay for Appendectomy Patients," *IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans*, Vol. 39, No. 6, Nov. 2009, pp.1339-1347. **(SCI)**
2. C. Wei, H. C. Chen, and T. H. Cheng, "Effective Spam Filtering: A Single-Class Learning and Ensemble Approach," *Decision Support Systems*, Vol. 45, No. 3, June 2008, pp.491-503 (NSC 95-2416-H-218-019). **(SCI, SSCI)**
3. T. H. Cheng and C. Wei, "A Clustering-based Approach for Integrating Document-Category Hierarchies," *IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans*, Vol. 38, No. 2, March 2008, pp. 410-424. **(SCI)**
4. P. J. Hu, T. H. Cheng, C. Wei, C. H. Yu, A. Chan, and H. Y. Wang, "Managing Clinical Use of High-Alert Drugs: A Supervised Learning Approach to Pharmacokinetic Data Analysis," *IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans*, Vol. 37, No. 4, July 2007, pp. 481 - 492. **(SCI)**
5. P. J. Hu, C. Wei, T. H. Cheng, and J. X. Chen, "Predicting Adequacy of Vancomycin Regimens: A Learning-Based Classification Approach to Improving Clinical Decision-Making," *Decision Support Systems*, Vol. 43, No. 4, August 2007,

- pp.1226-1241. **(SCI)**
6. C. Wei, T. H. Cheng, and Y. C. Pai, "Semantic Enrichment in Knowledge Repositories: Annotating Semantic Relationships between Discussion Documents," *Journal of Database Management*, Vol. 17, No. 1, Jan-Mar 2006, pp.1-15. **(SCI)** (MOE 91-H-FA08-1-4, NSC 93-2416-H-218-009)
  7. C. Wei, C. S. Yang, H. W. Hsiao, and T. H. Cheng, "Combining Preference- and Content-based Approaches for Improving Document Clustering Effectiveness," *Information Processing and Management*, Vol. 42, No. 2, March 2006, pp.350-372. **(SCI, SSCI)**

### Conference Papers:

1. T. H. Cheng, H. C. Chen, W. B. Lin, and Y. H. Lee, "Collaborative Filtering With User Interest Evolution," *Proceedings of the 15th Pacific Asia Conference on Information Systems (PACIS), Brisbane, Australia, July 2011, (PACIS 2011)*.
2. Y. H. Lee, P. J. Hu, T. H. Chu, T. H. Cheng, and H. W. Chen "A Temporal Frequent Itemset-Based Clustering Approach For Discovering Event Episodes From News Sequence," *Proceedings of the 15th Pacific Asia Conference on Information Systems (PACIS), Brisbane, Australia, July 2010, (PACIS 2011)*.
3. T. H. Cheng, C. W. Lan, C. P. Wei, H. Chang, "Cost-Sensitive Learning for Recurrence Prediction of Breast Cancer," *Proceedings of the 14th Pacific Asia Conference on Information Systems (PACIS), Taipei, Taiwan, July 2010, (PACIS 2010)*.
4. Y. H. Lee, P. J. Hu, W. Y. Chuang, T. H. Cheng, Y. C. Ku, "Supporting Acute Appendicitis Diagnosis: A Pre-Clustering-Based Classification Technique," *Proceedings of the 14th Pacific Asia Conference on Information Systems (PACIS), Taipei, Taiwan, July 2010, (PACIS 2010)*.
5. Y. H. Lee, P. J. Hu, T. H. Cheng, and Y. F. Hsieh, "Positive Example Learning For Content-Based Recommendations: A Cost-Sensitive Learning Based Approach," *Proceedings of International Conference on Information Systems 2009, (ICIS 2009) Arizona, USA, December 2009*.
6. Y. H. Lee, T. H. Cheng, C. Lan, C. Wei, and P. J. Hu, "Overcoming Small-size Training Set Problem in Content-based Recommendation: A Collaboration-based Training Set Expansion Approach," *Proceedings of the 11th International Conference on Electronic Commerce (ICEC 2009), Taipei, Taiwan, August 2009 (NSC 97-2410-H-218-017-MY2)*.
7. C. Wei, Chao-Chi Chen, T. H. Cheng and Christopher C. Yang, "A Feature-Reinforcement-Based Approach for Supporting Poly-Lingual Category Integration," *Proceedings of the Seventh Workshop on e-Business (WEB 2008), Paris, France, December 2008*.
8. T. H. Cheng and P. J. Hu, "Content-based Recommendations Using Positive-Only Examples: A Single-Class Learning Approach," *Proceedings of the Sixth Workshop on e-Business (WEB 2007), Montreal, Quebec, Canada, December 2007*.
9. C. Wei, G. H. Tzeng, and T. H. Cheng, "Cross-Lingual Category Integration," *Proceedings of the Fifth Workshop on e-Business (WEB 2006), Milwaukee, Wisconsin, U.S.A., December 2006*.
10. T. H. Cheng and C. Wei, "Single-Class Learning for Spam Filtering: An Ensemble Approach," *Proceedings of the 10<sup>th</sup> Pacific Asia Conference on Information Systems (PACIS), Kuala Lumpur, Malaysia, July 2006*
11. T. H. Cheng and Paul J. Hu, "Managing Length of Hospital Stay for Appendectomy: A

12. T. H. Cheng, C. Wei, and V. S. Tseng, "Feature Selection for Medical Data Mining: Comparisons of Expert Judgment and Automatic Approaches," *Proceedings of 19<sup>th</sup> IEEE International Symposium on Computer-Based Medical Systems (CBMS 2006)*, Salt Lake City, Utah, U.S.A., June 2006, pp.165-170.

### **Books**

1. C. Wei, P. J. Hu, T. H. Cheng, and J. Tan, "E-Medicine Development in Taiwan Case," Chapter 8 in *E-Health Care Information System*, Jossey-Bass, San Francisco, CA, 2005, pp.260-266.

### **Grants**

1. National Science Council, No: NSC-99-2410-H-218-022-MY2, "Improving Recommendation Novelty by Mining Users' Preference-Change Patterns," 2010.08.01~2012.07.31.
2. National Science Council, No: NSC-97-2410-H-218-017-MY2, "Recommender Systems by Learning Customer Preference Variation," 2008.08.01-2010.12.31.
3. National Science Council, No: NSC-96-2416-H-218-010, "Poly-Lingual Category Integration," 2007.08.01-2008.07.31
4. National Science Council, No: NSC-95-2416-H-218-019, "An Ensemble Approach for Personalized Recommendation with Positive and Unlabeled Training Examples," 2006.08.01-2007.07.31.
5. National Science Council, No: NSC-93-2416-H-218-009, "Supporting Text Categorization by Using Text Genre Feature," 2004.08.01-2005.07.31.

### **Acadmic Service**

- *Reviewer*, Journal of Information Management, 2010/07~2010/12.
- *Reviewer*, Journal of Internet Technology, 2010/07~2010/09.

### **Professional Certifications**

- *ERP Application Engineer for Distribution Module*, No: EAE10DS01501, Chinese Enterprise Resource Planning Society, 2010/05.
- *Business Intelligence Planner*, No: BIP11CE00593, Chinese Enterprise Resource Planning Society, 2010/05.
- *TQC-Advanced level for Word 2007*, Techficiency Quotient Certification, 2011/04.
- *TQC-Advanced level for Excel 2007*, Techficiency Quotient Certification, 2011/04.
- *TQC-Advanced level for PowerPoint 2007*, Techficiency Quotient Certification, 2011/04.
- *Microsoft Office Specialist Master Instructor*, Microsoft Certiport, 2009/11.
- *MOS for Microsoft Word*, Microsoft Certiport, Microsoft Certiport, 2009/11.
- *MOS for Microsoft Excel*, Microsoft Certiport, Microsoft Certiport, 2009/11.
- *MOS for Microsoft PowerPoint*, Microsoft Certiport, Microsoft Certiport, 2009/11.
- *MOS for Microsoft Access* Microsoft Certiport, Microsoft Certiport, 2009/11.
- *IC<sup>3</sup>(Internet and Computing Core Certification)*, Certiport, Global Digital Literacy Council, 2009/01.
- *TQC-Corporation E-planner (level 1)*, E-Enterprise Expert Certification- EEC series, 2009/06.