

# Curriculum Vitae

Date: 2005/01/11

## Personal Information

<b>Name</b>	Yi-Hung Wu		
<b>Birthday</b>	1971/08/28	<b>Sex</b>	Male
<b>Current career</b>	Postdoctoral Researcher [2001/10-now] Computer & Communication Research Center National Tsing Hua University		
<b>Address</b>	101, Section 2 Kuang Fu Road, Hsinchu, Taiwan 300, R.O.C.		
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	<i>dr824349@yahoo.com.tw</i>		



## Education

- [1994-2001] Ph. D. in Computer Science, National Tsing Hua University
- [1993-1994] Master student in Computer Science, National Tsing Hua University
- [1989-1993] B. D. in Computer Science, National Chao Tung University
- [1986-1989] The Affiliated Senior High School of National Taiwan Normal University

## Research Interests

- [2004-] Continuous Query Processing
- [2003-] Mining Data Streams
- [2001-] Multimedia Data Mining
- [1998-] Data Mining
- [1998-2001] Web Mining
- [1996-2000] Web Data Management
- [1995-1997] Internet Resource Discovery
- [1995] Video On Demand
- [1994-1995] Parallel Database System

## **Publications**

### Refereed Journal Papers

1. Y.H. Wu, C.M. Chiang, and A.L.P. Chen, "A New Approach for Sensitive Rule Hiding Avoiding Side Effects," *Submitted*.
2. D.Y. Chiu, Y.H. Wu, and A.L.P. Chen, "Mining Frequent Sequences by Direct Sequence Comparison: The Dynamic DISC-all Algorithm," *Submitted to IEEE Transactions on Knowledge and Data Engineering*.
3. N.H. Liu, Y.H. Wu, and A.L.P. Chen, 2005, "Efficient K-NN Search in Polyphonic Music Databases Using a Lower Bounding Mechanism," *ACM Multimedia Systems Journal (invited submission)*.
4. Y.H. Wu, M.Y.C. Chang, and A.L.P. Chen, 2005, "Discovering Phenomena - Correlations among Association Rules," *Journal of Internet Technology*, to appear.
5. Y.H. Wu and A.L.P. Chen, March 2002, "Prediction of Web Page Accesses by Proxy Server Log," *World Wide Web: Internet and Web Information Systems*, 5(1): 67-88, Kluwer Academic Publishers.

### Invited Articles and Book Chapters

1. Y.H. Wu and A.L.P. Chen, 2005, "Data Analysis," (*Invited*) *Encyclopedia of Computer Science and Computer Engineering (invited submission)*, John Wiley & Sons.
2. A.L.P. Chen and Y.H. Wu, 1999, "Data Analysis," *Wiley Encyclopedia of Electrical and Electronics Engineering*, pp. 506-514, John Wiley & Sons.

### Refereed Conference Papers

1. C.H. Lin, D.Y. Chiu, Y.H. Wu, and A.L.P. Chen, April 2005, "Mining Frequent Itemsets from Data Streams with a Time-sensitive Sliding Window," *Proceedings of SIAM Conference on Data Mining (SDM'05)*, to appear.
2. C.W. Cho, Y.H. Wu, and A.L.P. Chen, April 2005, "Effective Database Transformation and Fast Support Computation for Mining Sequential Patterns Efficiently," *Proceedings of International Conference on Database Systems for Advanced Applications (DASFAA'05)*, to appear.
3. N.H. Liu, Y.H. Wu, and A.L.P. Chen, April 2005, "An Efficient Approach to Extracting Approximate Repeating Patterns in Music Databases," *Proceedings of International Conference on Database Systems for Advanced Applications (DASFAA'05)*, to appear.
4. D.Y. Chiu, Y.H. Wu, and A.L.P. Chen, March 2004, "An Efficient Algorithm for Mining Frequent Sequences by a New Strategy without Support Counting," *Proceedings of IEEE Conference on Data Engineering (ICDE'04)*, pp. 375-386. (EI)
5. C.H. Lee, C.W. Cho, Y.H. Wu, and A.L.P. Chen, March 2004, "A Novel Representation of Sequence Data based on Structural Information for Effective Music Retrieval," *Proceedings of International Conference on Database Systems for Advanced Applications (DASFAA'04)*, *Lecture Notes in Computer Science*, 2973: 393-404. (SCI)
6. C.R. Lin, N.H. Liu, Y.H. Wu, and A.L.P. Chen, March 2004, "Music Classification Using Significant Repeating Patterns," *Proceedings of International Conference on Database Systems for Advanced Applications (DASFAA'04)*,

*Lecture Notes in Computer Science*, 2973: 506-518. (SCI)

7. N.H. Liu, Y.H. Wu, and A.L.P. Chen, November 2003, "Efficient K-NN Search in Polyphonic Music Databases Using a Lower Bounding Mechanism," *Proceedings of ACM SIGMM Workshop on Multimedia Information Retrieval (MIR'03)*, pp. 163-170.
8. C.W. Cho, Y.H. Wu, J. Liu, and A.L.P. Chen, December 2002, "A Graph-based Approach to Mining Inter-transaction Association Rules," *Proceedings of International Computer Symposium (ICS'02)*.
9. Y.H. Wu, Y.C. Chen, and A.L.P. Chen, April 2001, "Enabling Personalized Recommendation on the Web based on User Interests and Behaviors," *Proceedings of IEEE Workshop on Research Issues in Data Engineering (RIDE'01)*, pp. 17-24. (EI)
10. Y.H. Wu and A.L.P. Chen, April 2000, "Index Structures of User Profiles for Efficient Web Page Filtering Services," *Proceedings of IEEE Conference on Distributed Computing Systems (ICDCS'00)*, pp. 644-651. (EI)
11. Y.H. Wu, Y. H. Chen, and A.L.P. Chen, 1996, "Querying and Browsing the Resources in Internet," *Proceedings of International Computer Symposium (ICS'96)*, *Proceedings of SPIE - The International Society for Optical Engineering*, 2898: 197-208, 1996. (EI)

#### Domestic Conference Papers

1. D.Y. Chiu, D.Y. Lee, Y.H. Wu, and A.L.P. Chen, November 2004, "A Fast Method to Build the RCE-network Classifier," (一個快速建立RCE網路分類機制的的方法) *Proceedings of 9<sup>th</sup> Conference on Artificial Intelligence and Applications (TAAI'04)*, to appear.
2. W.H. Chen, Y.H. Wu, and A.L.P. Chen, December 1999, "Web-flow Mining Techniques, Applications and System Implementations," (網頁流探勘之技術、應用與系統實作) *Proceedings of National Computer Symposium (NCS'99)*, A: 26-32.
3. Y.H. Wu, Y.H. Chen, and A.L.P. Chen, 1996, "Object-Oriented Resource Query System in Internet," (網際網路上物件導向式資源查詢系統) *Proceedings of 7th Workshop on Object-Oriented Technology and Applications (OOT'96)*.
4. Y.H. Wu, P.S.M. Tsai, and S.C. Lo, etc., 1995, "Performance Analysis for Heterogeneous Distributed Database Systems," (異質性分散式資料庫系統的績效評估研究) *Proceedings of National Computer Symposium (NCS'95)*.

### Technical Reports and Others

1. A.L.P. Chen, Y.H. Wu, H.C. Chen, J. Lee, and M.H. Jain, 2004, "Sentence Analysis of Aboriginal Music," (原住民音樂之樂句分析) *Data Archival Technology Forum (DATF'04)*. (Poster paper)
2. Y.H. Wu, May 2001, "The Analysis, Indexing and Retrieval of Web Data," *Ph.D. Dissertation*, Department of Computer Science, National Tsing Hua University, Hsinchu, Taiwan.
3. Y.H. Wu, J.P. Chen, and A.L.P. Chen, 2001, "Indexing URL Profiles for Efficient Web Page Filtering Services," MAKE-Lab, NTHU, Hsinchu, Taiwan.
4. Y.H. Wu, Y.W. Wu, and A.L.P. Chen, 2001, "Effective Search on the Web Using Query Refinement," MAKE-Lab, NTHU, Hsinchu, Taiwan.

### Projects

- [2005-2006] Research of Continuous Query Processing Techniques over Data Streams (1st year) (NSC)
- [2004-2006] Technologies and Applications of Overlay Networks (1<sup>st</sup>~2<sup>nd</sup> year) (NSC: Program for Promoting Academic Excellence of Universities -- Phase II)
- [2002-2005] Research and Applications of Mining Techniques on Multimedia Data (1<sup>st</sup>~3<sup>rd</sup> year) (NSC)
- [2001-2004] Technologies and Applications for Next-generation Media (2<sup>nd</sup>~4<sup>th</sup> year) (MOE Program for Promoting Academic Excellence of Universities)
- [2001-2002] Research and Implementation of Personalized Recommendation Services by Data Mining Techniques (ITRI/CCL)
- [1999-2000] Research on Information Querying, Browsing, and Filtering Techniques for Electronic Commerce (NSC)
- [1998-1999] Data Mining and Applications based on Web-Page Access Logs (NCHC)
- [1997-1999] Research on Integration of Internet/WWW and Wireless Communication Architectures (1<sup>st</sup>~2<sup>nd</sup> year) (ITRI/CCL)
- [1996-1998] Research and Development of Techniques for Data Indexing, Querying, and Browsing (1<sup>st</sup>~2<sup>nd</sup> year) (NSC)
- [1995-1996] Research on Querying and Guided Browsing of Distributed Resources on the Internet (III)
- [1994-1995] Performance Evaluation of Heterogeneous Distributed Multi-database System (III)

### Academic Services

#### Conference Program Committee

- [2005] APWeb [*Pacific-Asia Web Conference*]

#### Journal Paper Reviewer

- [2003] VLDBJ [*VLDB Journal*]
- [2002] JISE [*Journal of Information Science and Engineering*]
- [2001] J-AI [*Journal of Applied Intelligence*]

### Conference Paper Reviewer

- [2005] DASFAA [*Conference on Database Systems for Advanced Applications*]  
APWeb
- [2004] VLDB [*International Conference on Very Large Databases*]  
PAKDD [*Pacific-Asia Conference on Knowledge Discovery and Data Mining*]
- [2002] VLDB (2)  
ICDE [*IEEE Conference on Data Engineering*]  
ICDM [*IEEE Conference on Data Mining*]  
WISE [*International Conference on Web Information Systems Engineering*]  
ODBASE
- [2001] RIDE [*IEEE Conference on Research Issues in Data Engineering*]  
DAWAK [*Conference on Data Warehousing and Knowledge Discovery*]
- [2000] VLDB (2)  
CIKM [*ACM Conference on Information and Knowledge Management*]  
ICME [*IEEE Conference on Multimedia and Expo*]  
WAIM [*International Conference on Web-Age Information Management*]
- [1999] ICTAI [*IEEE Conference on Tools with Artificial Intelligence*]
- [1998] VLDB (2)  
PAKDD
- [1997] VLDB  
DASFAA (3)
- [1996] VLDB  
CIKM
- [1994] ICPADS [*IEEE Conference on Parallel and Distributed Systems*]

### **Teaching**

[2004-2005]

- ✧ Database Theories, Department of Information and Computer Education, National Taiwan Normal University (NTNU)
- ✧ Internet Applications, Hsinchu campus, National Taichung Institute of Technology (NTIT)
- ✧ Office Software, Hsinchu campus, NTIT

[2003-2004]

- ✧ Image Processing, Hsinchu campus, NTIT
- ✧ Webpage Design, Hsinchu campus, NTIT
- ✧ Internet Applications, Hsinchu campus, NTIT
- ✧ Data Processing, Hsinchu campus, NTIT
- ✧ Multimedia Applications, Hsinchu campus, NTIT
- ✧ Office Software, Hsinchu campus, NTIT

[2002-2003]

- ✧ Internet Applications, Hsinchu campus, NTIT
- ✧ Data Processing, Hsinchu campus, NTIT
- ✧ Multimedia Applications, Hsinchu campus, NTIT
- ✧ Office Software, Hsinchu campus, NTIT

[2000-2001]

- ✧ Information Systems and Applications, Department of Life Science, National Tsing Hua University (NTHU)

[1999-2000]

- ✧ Data Structure, Department of Economics, NTHU

[1998-1999]

- ✧ Microsoft Access Database Management, Job Training Course, Tze-Chiang Foundation of Science and Technology (TCFST)
- ✧ Information Systems and Applications, Department of Chinese Literature, NTHU
- ✧ Information Systems and Applications, Department of Materials Science and Engineering, NTHU

[1997-1998]

- ✧ Information Systems and Applications, Department of Foreign Language and Literature, NTHU
- ✧ Information Systems and Applications, Department of Economics, NTHU

[1996-1997]

- ✧ Introduction to Computers, Department of Engineering and System Science, NTHU

[1993-1996]

- ✧ Teaching Assistant in Engineering Mathematics, Discrete Mathematics, System Programming, and Introduction to Computers, Department of Computer Science, NTHU