



Chieh-Jen Wang (王界人)

Computational Intelligence Technology Center,
Industrial Technology Research Institute.
Rm. 705, Bldg. 51, No. 195, Sec. 4, Chung Hsing Rd.,
Hsinchu, 31040, Taiwan.
Tel: +886-3-591-8305 (office)
+886-3-582-0098 (Fax)
Email: cjwang@nlg.csie.ntu.edu.tw
cjwang0318@gmail.com
Website: <http://nlg.csie.ntu.edu.tw/~cjwang/>

Education

- **National Taiwan University** 2007-2013
Ph.D. of Computer Science and Information Engineering
Dissertation: Enhancing Effectiveness of Internet Search and Advertising with Web Log Mining
Advisor: Prof. Hsin-Hsi Chen (陳信希教授)
- **HuaFan University** 2003-2005
Master of Science degree in Information Management
Thesis: A GA-Based Attribute Selection and Parameter Optimization for Support Vector Machine
Advisor: Prof. Cheng-Lung Huang (黃承龍教授)
- **HuaFan University** 1999-2003
Bachelor of Science degree in Information Management

Working Experience

- Engineer/Project Leader (Industrial Technology Research Institute) 2013-present
- System and Web Administrator (National Taiwan University) 2010-2012
- System and Web Administrator (HuaFan University) 2004-2005
- Student Intern (Kingston Technology) 2002

Area of Specialization and Interest

- **Data Mining**
Big Data Mining, Text Mining, Web Mining, Web Log Mining, Opinion Mining
- **Internet Search**
Information Retrieval, Commercial Search, Information Extraction, Natural Language Processing
- **Internet Economics and Advertising**
Computational Advertising, Sponsored Search, Advertising Recommendation
- **Artificial Intelligence**
Virtual Customer Assistant, Question Answering, Deep Learning, Topic Detection and Tracking

Attended Projects

1. **工業技術研究院(Industrial Technology Research Institute)** 2015
互動式知識問答技術(專案負責人)
家庭購物口語互動服務(研發工程師)
2. **工業技術研究院(Industrial Technology Research Institute)** 2014
面向式意見探勘於線上消費者評論之應用(專案負責人)
互動式知識問答技術(研發工程師)
3. **工業技術研究院(Industrial Technology Research Institute)** 2013
互動式知識問答技術(研發工程師)
多領域高可擴充式對話技術(研發工程師)
非結構化資料處理智慧技術(研發工程師)
4. **中華電信研究院 (Chunghwa Telecom Laboratories)** 2013
語意理解技術 (Research Assistant)
5. **國家科學委員會 (National Science Council)** 2012-2013
跨領域機器翻譯模型之研究：以病歷摘要翻譯系統之研製為例
(Research Assistant)
6. **財團法人資訊工業策進會(Institute for Information Industry)** 2011
應用 Semantic Web 於影音內容推薦之研究 (Research Assistant)
7. **國家科學委員會 (National Science Council)** 2010-2013
使用者意圖與行動之分析與預測，以及在資訊存取上的應用
(Research Assistant)
8. **國家科學委員會 (National Science Council)** 2009-2012
以機器學習法研究資訊檢索相關性、多樣性、多語性排列問題
(Research Assistant)
9. **國家科學委員會 (National Science Council)** 2007-2009
以部落格內容和結構探勘研究使用者之個別和群體行為 (Research Assistant)
10. **國家科學委員會 (National Science Council)** 2007
解決機器學習的大型計算問題 (Research Assistant)
11. **國家科學委員會 (National Science Council)** 2004-2005
最佳化屬性選擇於機器學習為基生產管制系統 (Research Assistant)
12. **國家科學委員會 (National Science Council)** 2004-2005
投資決策支援系統之網站平台設計—以創投公司之資金供需決策為對象
(Research Assistant)
13. **國家科學委員會 (National Science Council)** 2002-2003
以資料探勘方法改善生產與品質績效並建構其分散式資料探勘系統
(Research Assistant)
14. **金士頓科技股份有限公司 (Kingston Technology Company)** 2002-2003
記憶體測試機台生產線模擬系統建構與最佳化資源配置
(Research Assistant and System Administrator)

Talk

- Big Data 前瞻智慧藍圖與應用發展趨勢 (Kaohsiung First University of Science and Technology) 2015
- Big Data 前瞻智慧藍圖與應用發展趨勢(Hua Fan University) 2013
- Big Data 前瞻智慧藍圖與應用發展趨勢(Yuan Ze University) 2013
- Big Data for Internet Advertising(Shih Chien University) 2013

Grants/Awards

- Student Volunteer Grant of IEEE SMC 2012
- Support by International Conference Grant of Aim for the Top University Project 2012
- Support by International Conference Grant of NSC 2011
- Student Volunteer Grant of IEEE SMC 2011
- Support by International Conference Grant of IEEE Taipei Section 2011
- Support by International Conference Grant of Aim for the Top University Project 2011
- Support by International Conference Grant of NSC 2010
- Student Travel Grant for SIGIR 2010
- Support by International Conference Grant of ACLCLP 2010
- Outstanding student scholarship of Cathay Financial Group 2010
- Outstanding student scholarship of HuaFan University 2004
- Outstanding scholarship of Chunghwa Telecom Staffs' Children 2004
- Outstanding scholarship of Chunghwa Post Staffs' Children 2004

Academic Experience

- **Teaching Assistant (National Taiwan University)** 2010-2012
Information Retrieval and Extraction, Natural Language Processing
- **Research Assistant (Academia Sinica)** 2006-2007
Big Data Mining (Machine Learning Lab)
- **Teaching Assistant (HuaFan University)** 2003-2005
Total Quality Management, Management Science, Research Methods, System Analysis and Design, Civil and Commercial Law

Academic Activity

- **Journal Reviewer** 2013-2016
Journal of Information Science and Engineering (SCI)
- **Student Volunteer** 2012
IEEE International Conference on Systems, Man, and Cybernetics
- **Student Volunteer** 2011
IEEE International Conference on Systems, Man, and Cybernetics
- **Invited Presenter** 2010
Microsoft Research Asia Japan-Taiwan Academic Forum
- **Staff** 2007
The 19th Conference on Computational Linguistics and Speech Processing

Language Skills

- Chinese (native speaker)
- Taiwanese (native speaker)
- English (fluent speaker)

Publication

Journal Papers:

1. **Chieh-Jen Wang** and Hsin-Hsi Chen. "Intent Mining in Search Query Logs for Automatic Search Script Generation." *Knowledge and Information Systems*, Volume 39, Issue 3, pp. 513-542, 2014. (SCI; IF 2011:2.225; COMPUTER SCIENCE, INFORMATION SYSTEMS: 18/135=13.33%)
2. **Chieh-Jen Wang**, Yung-Wei Lin, Ming-Feng Tsai and Hsin-Hsi Chen. "Mining Subtopics from Different Aspects for Diversifying Search Results." *Information Retrieval*, Volume 16, Issue 4, pp. 452-483, 2013. (SCI; IF 2011:0.914; COMPUTER SCIENCE, INFORMATION SYSTEMS: 69/135=51.11%)
3. **Chieh-Jen Wang**, and Hsin-Hsi Chen. "Intent Shift Detection Using Search Query Logs." *International Journal of Computational Linguistics and Chinese Language Processing*, Volume 3, Number 3-4, pp. 61-76, 2011.
4. Cheng-Lung Huang, Mu-Chen Chen and **Chieh-Jen Wang**. "Credit Card Scoring with a Data Mining Approach Based on Support Vector Machine." *Expert Systems with Applications*, Volume 34, Issue 3, pp. 847-856, 2007. (SCI; IF 2011: 2.203; OPERATIONS RESEARCH & MANAGEMENT SCIENCE: 5/77=6.49%) (Times cited in Google Scholar: 226) (ESI Highly Cited Paper)
5. Cheng-Lung Huang and **Chieh-Jen Wang**. "A GA-Based Attribute Selection and Parameter Optimization for Support Vector Machine." *Expert Systems with Applications*, Volume 31, Issue 2, pp.231-240, 2006. (SCI; IF 2011: 2.203; OPERATIONS RESEARCH & MANAGEMENT SCIENCE: 5/77=6.49%) (Times cited in Google Scholar: 366) (ESI Highly Cited Paper)
6. 黃承龍，陳穆臻，王界人，「支援向量機於信用評等之應用」，計量管理期刊, Volume 1, Issue 2, pp.155-172, 2005.

Conference Papers:

1. 王界人、沈民新 (2015). "運用關聯分析探勘民眾關注議題與發展方向: 以環保議題為例." In *Proceedings of the 27th annual Conference on Computational Linguistics and Speech Processing (ROCLING)*.
2. Yang-Yin Lee, Chih-Chieh Shao, Yen-Pin Chiu, Yong-Siang Shih, Hsin-Hsi Chen, **Chieh-Jen Wang**, and Sen-Chia Chang (2014). "Question Type Analysis for Question-Answering Applications in Education." In *Proceedings of the 22nd International Conference on Computers in Education (ICCE)*.
3. **Chieh-Jen Wang** and Hsin-Hsi Chen (2012). "Learning to Predict the Cost-Per-Click for Your Ad Words." In *Proceedings of the 21st ACM International Conference on Information and Knowledge Management (CIKM)*, pp. 2291-2294, Maui, Hawaii. (Top-tier Conference)
4. **Chieh-Jen Wang**, Hung-Sheng Huang and Hsin-Hsi Chen (2012). "Automatic Construction of An Evaluation Dataset from Wisdom of the Crowds for Information Retrieval Applications." In *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pp. 490-495, Seoul, Korea.
5. **Chieh-Jen Wang**, Shuk-Man Cheng, Lung-Hao Lee, Hsin-Hsi Chen, Wen-shen Liu, Pei-Wen Huang and Shih-Peng Lin (2012). "NTUSocialRec: An Evaluation Dataset Constructed from Microblogs for Recommendation Applications in Social Networks." In *Proceedings of the 8th International Conference on Language Resources and Evaluation (LREC)*, pp.2328-2333, Istanbul, Turkey.
6. **Chieh-Jen Wang**, Yung-Wei Lin, Ming-Feng Tsai and Hsin-Hsi Chen (2011). "NTU Approaches to Subtopic Mining and Document Ranking at NTCIR-9 Intent Task." In the *9th NTCIR Workshop Meeting*, pp.129-134, Tokyo, Japan.

7. **Chieh-Jen Wang** and Hsin-Hsi Chen (2011). "Learning User Behaviors for Advertisements Click Prediction." In *the 34rd international ACM SIGIR conference on Research and development in information retrieval Workshop on Internet Advertising (IA2011)*, Beijing, China.
8. **Chieh-Jen Wang** and Hsin-Hsi Chen (2011). "Search Scripts Mining from Wisdom of the Crowds." In *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pp.878-883, Anchorage, Alaska.
9. Kevin Hsin-Yih Lin, **Chieh-Jen Wang** and Hsin-Hsi Chen (2011). "Predicting Next Search Actions with Search Engine Query Logs." In *Proceedings of 2011 IEEE/WIC/ACM International Conference on Web Intelligence (WI)*, pp.227-234, Lyon, France.
10. **Chieh-Jen Wang**, Kevin Hsin-Yih Lin and Hsin-Hsi Chen (2010). "Intent Boundary Detection in Search Query Logs." In *Proceedings of the 33rd international ACM SIGIR conference on Research and development in information retrieval (SIGIR)*, pp. 749-750, Geneva, Switzerland. (Top-tier Conference)
11. Shih-Wei Lin, Shih-Chieh Chen, **Chieh-Jen Wang** and Kung-Ying Hwang (2005). "Data classification techniques for Credit Cards Promotion." In *12th ISPE International Conference on Concurrent Engineering: Research and Applications*, pp. 195-200, Dallas, USA.
12. 黃承龍，楊俊傑，應哲磊，王界人，「使用支援向量機預測台灣期貨指數」，2005年第十一屆資訊管理暨實務研討會，實踐大學，2005.
13. 林詩偉，陳士杰，王界人，「應用資料探勘技術提昇信用卡促銷效益之研究」，第一屆創新與管理學術研討會，實踐大學，2004.
14. 黃承龍，王界人，「應用支援向量機於信用卡資料之分類」，2004年第一屆中華國際機率統計與計量管理學術研討會，國立台北科技大學，2004.
15. 黃承龍，王界人，「遺傳演算法應用於支援向量機之參數調整與屬性篩選」，第九屆人工智慧與應用研討會，國立政治大學，2004.
16. 黃承龍，曾綜源，楊雯琄，王界人，「支援向量機於糖尿病診斷之應用」，中國工業工程學會九十三年度年會暨學術研討會，國立成功大學，2004.
17. 曾綜源，黃承龍，王界人，「優勢關係評估法應用於企業跨國投資之研究」，第一屆台灣作業研究學會學術研討會暨2004年科技與管理學術研討會，國立台北科技大學，2004.
18. 黃承龍，王界人，「遺傳演算法應用於支援向量迴歸之參數調整與屬性篩選」，第十屆資訊管理暨實務研討會，國立台中技術學院，2004.

Other Publications:

1. **Chieh-Jen Wang**. "Enhancing Effectiveness of Internet Search and Advertising with Web Log Mining." Doctoral Dissertation, Department of Computer Science and Information Engineering, National Taiwan University, Taipei, Taiwan, R.O.C, 2013.
2. **Chieh-Jen Wang**. "A GA-Based Attribute Selection and Parameter Optimization for Support Vector Machine." Master Thesis, Department of Information Management, HuaFan University, Taipei, Taiwan, R.O.C, 2005.