

Wingyan Chung, Ph.D.

Assistant Professor, Department of Operations and Management Information Systems
Leavey School of Business, Santa Clara University, California, USA
Tel: (408) 554-2174; Email: wchung@scu.edu
Web sites: <http://129.210.118.143/>

1. EDUCATION

- **Ph.D.** in Management Info. Systems (Minor: Computer Science), The University of Arizona, 2004.
 - The Arizona's MIS program has been ranked consistently among the top 5 in the U.S.
- **M.S.** in Information and Technology Management, The Chinese University of Hong Kong, 2000.
 - Received a **scholarship award** in 1999 in recognition of outstanding academic achievement.
- **Postgraduate Cert. in Education** (Business and Accounts), The University of Hong Kong, 1997.
- **Bachelor of Business Administration (Hon)**, The Chinese University of Hong Kong, 1993.

2. RESEARCH INTERESTS

Knowledge management, business intelligence, Web analysis and mining, design science in IS, security informatics, information visualization, data and text mining, e-commerce, human-computer interaction.

3. TEACHING INTERESTS

Database management, business intelligence, knowledge management, decision support systems, programming, system analysis and design, Web development.

4. PROFESSIONAL EXPERIENCE

- | | |
|-------------|---|
| 2007 – now | Assistant Professor, Dept. of Operations and Management Information Systems, Leavey School of Business, Santa Clara University (U.S. News ranked the SCU Evening MBA Program #13 in the nation and the Executive MBA program #19 in the nation). |
| 2004 – 2007 | Assistant Professor, Department of Information and Decision Sciences, College of Business Administration, The University of Texas (El Paso). |
| 2001 – 2004 | Research Associate, Artificial Intelligence Lab, Department of Management Information Systems, Eller College of Management, The University of Arizona (The UA MIS program has been ranked consistently among the top 5 in the U.S.). |
| 2000 – 2001 | Graduate Teaching Associate, Department of Management Information Systems, Eller College of Management, The University of Arizona. |
| 1998 – 2000 | Teaching Assistant, Department of Decision Sciences and Managerial Economics, Faculty of Business Administration, The Chinese University of Hong Kong. |
| 1997 – 1999 | Business Studies Subject Committee Member (Sixth-Form, pre-university level), Curriculum Development Institute, Hong Kong Education Department. |
| 1997 – 1999 | Commerce Subject Committee Member (Secondary level), Curriculum Development Institute, Hong Kong Education Department. |
| 1998 – 1999 | Commercial Subject Textbook Review Panel Member, Textbook Committee, Hong Kong Education Department. |
| 1994 – 1998 | Graduate Master and Commercial Subjects Panel Chairman, CCC Tam Lee Lai Fun Memorial School, Hong Kong. |
| 1993 – 1994 | Graduate Master, Ho Fung College, Hong Kong. |

5. REFEREED PUBLICATIONS

JOURNAL ARTICLES

1. **Chung, W.**, Chen, H., Reid, E. "Business stakeholder analyzer: An experiment of classifying stakeholders on the Web," *Journal of the American Society for Information Science and Technology*, 60(1), 2009, pp. 59-74 (*JASIST* has been a **top journal in IST published continuously since 1950**).
2. **Chung, W.** "Web Searching in a Multilingual World," *Communications of the ACM*, 51(5), 2008, pp. 32-40 (*CACM* is the **#1 most frequently cited journal** in software engineering, according to ISI).
3. **Chung, W.** and Chen, H., "Browsing the underdeveloped Web: An experiment on the Arabic Medical Web Directory," *Journal of the American Society for Information Science and Technology* (fully accepted, forthcoming).
4. **Chung, W.** "Enhancing business intelligence quality with information visualization: An experiment on stakeholder network analysis," *Pacific Asia Journal of the Association for Information Systems* (fully accepted, forthcoming).
5. Chen, H., **Chung, W.**, Qin, J., Reid, E., Sageman, M. and Weimann, G. "Uncovering the Dark Web: A Case Study of Jihad on the Web," *Journal of the American Society for Information Science and Technology*, 59(8), 2008, pp. 1347-1359.
6. **Chung, W.**, Lai, G., Bonillas, A., Xi, W. and Chen, H. "Organizing domain-specific information on the Web: An experiment on the Spanish business Web directory," *International Journal of Human-Computer Studies*, 66 (2), 2008, pp. 51-66.
7. **Chung, W.** "Visualizing E-Business Stakeholders on the Web: A Methodology and Experimental Results," *International Journal of Electronic Business*, 6 (1), 2008, pp. 25-46.
8. Leroy, G., Xu, J., **Chung, W.**, Eggers, S., and Chen, H. "An end-user evaluation of query formulation and results review tools in three medical meta-search engines," *International Journal of Medical Informatics*, 76 (11-12), 2007, pp. 780-789.
9. **Chung, W.** "Studying information seeking on the non-English Web: An experiment on a Spanish business Web portal," *International Journal of Human-Computer Studies*, 64 (9), 2006, pp. 811-829 (among the **top 25 most downloaded papers** of the journal during Jul-Sep 2006).
10. **Chung, W.**, Bonillas, A., Lai, G., Xi, W. and Chen, H. "Supporting Non-English Web Searching: An Experiment on the Spanish Business and the Arabic Medical Intelligence Portals," *Decision Support Systems*, 42(3), 2006, pp. 1697-1714.
11. **Chung, W.**, Chen, H., Chang, W. and Chou, S. "Fighting cybercrime: a review and the Taiwan experience," *Decision Support Systems*, 41(3), 2006, pp. 669-682 (among the **top 25 most downloaded papers** of the journal during Jan-Mar 2006).
12. **Chung, W.**, Chen, H. and Nunamaker, J. "A visual framework for knowledge discovery on the Web," *Journal of Management Information Systems*, 21(4), 2005, pp. 57-84.
13. **Chung, W.**, Chen, H., Chaboya, L.G., O'Toole, C. and Atabakhsh, H. "Evaluating event visualization: a usability study of COPLINK Spatio-Temporal Visualizer," *International Journal of Human-Computer Studies*, 62(1), 2005, pp. 127-157.
14. Marshall, B., McDonald, D., Chen, H. and **Chung, W.** "EBizPort: collecting and analyzing business intelligence information," *Journal of the American Society for Information Science and Technology*, 55(10), 2004, pp. 873-891.
15. **Chung, W.**, Zhang, Y., Huang, Z., Wang, G., Ong, T.-H. and Chen, H. "Internet searching and browsing in a multilingual world: an experiment on the Chinese Business Intelligence Portal (CBizPort)," *Journal of the American Society for Information Science and Technology*, 55(9), 2004, pp. 818-831.
16. Chen, H., **Chung, W.**, Xu, J., Wang, G., Chau, M. and Qin, Y. "Crime data mining: a general framework and some examples," *IEEE Computer*, 37(4), April 2004, pp. 50-56.
17. Huang, Z., **Chung, W.** and Chen, H. "A graph model for e-commerce recommender systems," *Journal of the American Society for Information Science and Technology*, 55(3), 2004, 259-274.
18. Lai, V.S. and **Chung, W.** "Managing international data communications: a Delphi study of issues," *Communications of the ACM*, 45(3), March 2002, pp. 89-93.

BOOKS/BOOK CHAPTERS

19. **Chung, W.** and Chen, H. "Web-based business intelligence systems: A review and case studies,"

Handbooks in Information Systems Series Vol. 3, Adomavicious & Gupta, Eds., Emerald Group Publishing Limited, 2009, pp. 373-400.

20. **Chung, W.** "An Automatic Text Mining Framework for Knowledge Discovery on the Web," Ph.D. Dissertation, The University of Arizona, 2004.

PROCEEDINGS/PRESENTATIONS AT SEMINARS, CONFERENCES, AND MEETINGS

21. Yang, S., Fox, E., and **Chung, W.** "Living In the KnowlEdge Society (LIKES) Initiative and i-Schools' Focus on the Information Field," *Proceedings of The Fourth iSchools Conference*, The University of North Carolina, Chapel Hill, NC, Feb. 8-11, 2009 (accepted).
22. Carr, E., Fox, E., Beck, B., **Chung, W.**, Evia, C., Fan, P., Sheetz, S., Zobel, C. "Living In the KnowlEdge Society Community Building Project," *Proceedings of the 40th ACM Technical Symposium on Computer Science Education*, Chattanooga, TN, Mar. 4-7, 2009 (accepted).
23. **Chung, W.** "Report on the First NSF LIKES Workshop held at Santa Clara University," *NSF Workshop on the Living in the KnowlEdge Society Community Building Project*, Virginia Polytechnic Institute and State University, Blacksburg, VA, Oct. 31-Nov. 1, 2008.
24. **Chung, W.** "Report on the First NSF LIKES Workshop held at Santa Clara University," *NSF Workshop on the Living in the KnowlEdge Society Community Building Project*, North Carolina A&T University, Greensboro, NC, April 18-19, 2008.
25. **Chung, W.** and Chen, H. "Building a Directory for the Underdeveloped Web: An Experiment on the Arabic Medical Web Directory," *Proceedings of the 10th International Conference on Asian Digital Libraries*, LNCS 4822, Hanoi, Vietnam, December 10-13, 2007, pp. 468-477.
26. **Chung, W.** and Leung, A. "Supporting Web searching of business intelligence with information visualization," *Proceedings of the IEEE/WIC/ACM International Conference on Web Intelligence*, Fremont, CA, November 2-4, 2007, pp. 807-811.
27. **Chung, W.** and Wang, G. "Profiling and Visualizing Cyber-criminal Activities: A General Framework," *Proceedings of the International Conference on Intelligence and Security Informatics*, New Brunswick, NJ, May 23-24, 2007, p. 377.
28. **Chung, W.** "Supporting E-Business Stakeholder Analysis with a Visualization Tool: An Experiment with Students and Business Practitioners," *Proceedings of The Fifth Workshop on e-Business*, Milwaukee, WI, December 9, 2006.
29. **Chung, W.** "Evaluating the use of a visual approach to business stakeholder analysis," *Proceedings of the Fifth Annual Workshop on HCI Research in MIS*, Milwaukee, WI, December 9, 2006, pp.40-44.
30. **Chung, W.** "Designing Web-based Business Intelligence Systems: A Framework and Case Studies," *Proceedings of The First International Conference on Design Science Research in Information Systems and Technology*, Claremont, CA, February 24-25, 2006, pp. 147-171.
31. Tseng, B., Huang, C.C., **Chung, W.** and Jiang, F. "Applying a Hybrid Data Mining Approach to Tumor Malignancy Prediction", *Proceeding of the Industrial Engineering Research 2006 Conference*, Orlando, FL, May 20-24, 2006.
32. **Chung, W.** "Decision Support in Business Stakeholder Analysis: An Automatic Classification Approach versus Human Judgment," *Proceedings of the 36th Annual Meeting of the Decision Sciences Institute*, San Francisco, CA, November 19-22, 2005, pp. 15681-15686.
33. **Chung, W.** "Searching for non-English Web content: an empirical study of the Spanish Business Intelligence Portal," *Proceedings of the Americas Conference on Information Systems*, Omaha, NE, August 11-14, 2005, pp. 2298-2305.
34. **Chung, W.**, Lai, G., Bonillas, A., Elhourani, T., Tseng, B., and Chen, H. "Building Web directories in different languages for decision support: a semi-automatic approach," *Proceedings of the Americas Conference on Information Systems*, Omaha, NE, August 11-14, 2005, pp. 1470-1478.
35. Tseng, B., Kwon, Y., Ertekinc, Y.M., **Chung, W.**, and Jiang, F. "Comparative analysis between in-process CNC touch probe gauging and post-process CMM inspection," *Proceedings of IEE Industrial Engineering Research Conference*, Atlanta, GA, May 14-18, 2005.
36. **Chung, W.** "Business Stakeholder Analyzer: An automatic classification approach to facilitating collaborative commerce on the Web," *Proceedings of the 38th Hawaii International Conference on System Sciences*, Island of Hawaii, HI, January 3-6, 2005.
37. **Chung, W.**, Elhourani, T., Bonillas, A., Lai, G., Xi, W., and Chen, H. "Supporting information seeking in multinational organizations: A knowledge portal approach," *Proceedings of the 38th Hawaii International Conference on System Sciences*, Island of Hawaii, HI, January 3-6, 2005.

38. Chen, H., Qin, J., Reid, E., **Chung, W.**, Zhou, Y., Xi, W., Lai, G., Bonillas, A. and Sageman, M., "The Dark Web Portal: Collecting and Analyzing the Presence of Domestic and International Terrorist Groups on the Web," *Proceedings of the 7th International Conference on Intelligent Transportation Systems (ITSC)*, Washington D.C., October 3-6, 2004.
39. Reid, E., Qin, J., **Chung, W.**, Xu, J., Zhou, Y., Schumaker, R., Sageman, M. and Chen, H. "Terrorism knowledge discovery project: a knowledge discovery approach to addressing the threats of terrorism," *Proceedings of the Second Symposium on Intelligence and Security Informatics*, June 10-11 2004, Tucson, AZ, 2004, pp.125-145.
40. **Chung, W.**, Chaboya, L.G., O'Toole, C. and Atabakhsh, H. "An evaluation methodology for coordinated event visualization in digital libraries," *Proceedings of The Fourth ACM/IEEE-CS Joint Conference on Digital Libraries*, Tucson, AZ, June 7-11, 2004, p. 393.
41. Chang, W., **Chung, W.**, Chen, H. and Chou, S. "An international perspective on fighting cybercrime," *Proceedings of the First NSF/NIJ Symposium on Intelligence and Security Informatics*, Tucson, AZ, June 2-3, 2003, pp. 379-384.
42. Zhou, Y., Qin, J., Chen, H., Huang, Z., Zhang, Y., **Chung, W.** and Wang, G. "CMedPort: a cross-regional Chinese medical portal," *Proceedings of the Third ACM/IEEE-CS Joint Conference on Digital Libraries*, Houston, TX, May 27-31, 2003, p. 379.
43. Chen, H., **Chung, W.**, Qin, Y., Chau, M., Xu, J., Wang, G., Zheng, R. and Atabakhsh, H. "Crime data mining: an overview and case studies," *Proceedings of the National Conference for Digital Government Research*, Boston, MA, May 18-21, 2003, pp. 45-48.
44. **Chung, W.**, Chen, H. and Nunamaker, J. "Business Intelligence Explorer: A knowledge map framework for discovering business intelligence on the Web," *Proceedings of the 36th Hawaii International Conference on System Sciences*, Island of Hawaii, HI, January 6-9, 2003.
45. Huang, Z., **Chung, W.**, Ong, T. and Chen, H. "A graph-based recommender system for digital library," *Proceedings of the Second ACM/IEEE-CS Joint Conference on Digital Libraries*, Portland, OR, July 14-18, 2002, pp. 65-73.
46. **Chung, W.** "A conceptual analysis on correlating the CASE success factors with the dimensions of IS function performance," *Proceedings of the 5th World Multiconference on Systemics, Cybernetics and Informatics (SCI)*, Orlando, FL, July 22-25, 2001.
47. **Chung, W.** "The use of large-scale non-linear integer programming in scheduling the timetable of a secondary school in Hong Kong," *Proceedings of the Fourth Asia Pacific Decision Science Institute Conference*, Shanghai, June 10-13, 1999.

6. PHD DISSERTATION

- Title: An Automatic Text Mining Framework for Knowledge Discovery on the Web.
- Publication Year: 2004; UMI Number: 3132206.
- Dissertation director: Dr. Hsinchun Chen ([Top 10 IS researchers](#), CAIS 2005; IEEE Fellow).
- Committee members: Dr. Jay F. Nunamaker Jr. ([Top 10 IS researchers](#), CAIS 2005), Dr. J. Leon Zhao (2005 IBM Faculty Award Winner), Dr. Richard T. Snodgrass (2005 Winner of Outstanding Contribution to ACM), Dr. Terry Langendoen (Fellow, American Asso. for the Advancement of Science).

7. GRANTS ACTIVITIES

Mar. 2008	Presidential Research Grant, Santa Clara University (funded, \$2,617).
Aug. 2007	Co-PI, "Living In the KnowlEdge Society (LIKES)" NSF CISE Pathways to Revitalized Undergraduate Computing Education (funded, \$70,000).
June 2006	PI, UTEP College of Business Administration Summer Grant (funded, \$5,000).
May 2005	PI, "Securing the U.S.-Mexico Border: Event Visualization for Crime Analysis and Investigation," submitted to NSF Advancing Collab. & Intelligent Systems, (not funded).
May 2005	PI, UTEP College of Business Administration Summer Grant (funded, \$5,000).
Summer 2005	PI, supplemental grant from UTEP Sponsored Project Office (funded, \$1,510).
Nov. 2004	PI, "Discovering BI from Multinational Stakeholders on the Web: A Multilingual Text Mining Framework," submitted to Microsoft New Faculty Fellowship Prog., (not funded).
October 2004	"Discovering Business Intelligence from Stakeholders on the Web: A Knowledge Network Approach" submitted to URI Grant Program, UTEP (funded, \$2,200).
Nov. 2002	"NSF/CIA KDD Testbed, Evaluation, and Research Framework" submitted to National

Science Foundation's KDD Program (**funded, US\$250,000**).

8. TEACHING

Teaching Assignment

Santa Clara U.

Winter-Spring 2009	Faculty advisor, MSIS capstone project "Ernst & Young Pacific Northwest Advisory Services" (supervises a group of five MSIS students)
Summer 2008	Curriculum revision for two MSIS courses (BI & DW; Database Management Systems)
Fall 2008	OMIS 105 – Database Management Systems (senior UG level)
Fall 2008	MSIS 621 / OMIS 386 – Business Intelligence and Data Warehousing (MBA/MSIS level)
Spring 2008	OMIS 366 / MSIS 603 – Database Management Systems (MBA/MSIS level)
Spring 2008	OMIS 105 – Database Management Systems (senior UG level)
Winter 2008	OMIS 34 – Management Information Systems (sophomore UG level)
Fall 2007	MSIS 621 / OMIS 386 – Business Intelligence and Data Warehousing (MBA/MSIS level)
Fall 2007	OMIS 113 – Data Warehousing and Data Mining (senior UG level)

Univ. of Texas

Spring 2007	CIS 5394 – Business Intelligence and Security Informatics (MBA level)
Spring 2007	CIS2320 – Intro. to Computers and Compu. App. Software
Fall 2006	CIS 4365 – Database Management
Fall 2006	CIS 4320 – OO Programming Environment
Summer 2006	CIS 4365 – Database Management
Spring 2006	CIS 5311 (MBA) – MIS Theory & Practice (MBA level)
Spring 2006	CIS 4365 – Database Management
Fall 2005	CIS 4365 – Database Management
Fall 2005	CIS 4320 – Object-oriented Programming Environment.
Summer 2005	CIS 4365 – Database Management
Spring 2005	CIS 4330 / CIS 5394 – Expert Systems and Decision Support Systems (MBA level)
Spring 2005	CIS 5311 (MBA) – MIS Theory and Practice
Fall 2004	CIS 4320 – Object-oriented Programming Environment.
Fall 2004	CIS 4399 – Current Topics in CIS: Knowledge management and data mining

Arizona / HK

Winter 2003	Instructor, Intro to Business Information Systems, Dept of MIS, Univ. of Arizona.
2000 – 2001	Teaching assistant, Dept. of MIS, Univ. of Arizona.
1998 – 2000	Teaching assistant, Dept. of Decision Sci. & Mgr. Econ., Chinese Univ. of Hong Kong.
1994 – 1998	Business Studies (pre-university level), TLLF Memorial School, Hong Kong.
1994 – 1998	Commerce (certificate level), TLLF Memorial School, Hong Kong.

9. SERVICES

Internal Services

2008 - now	Member, Faculty Recruiting Committee
2008 - now	OMIS Department Representative, Provost Inclusive-Excellence Advisory Committee
2007 - now	Faculty Advisor, SCU OMIS Student Network
2005 - 2006	UTEP undergraduate CIS curriculum coordinator
2006	Proposed a new graduate course titled "Business Intelligence and Security Informatics" that was approved by UTEP IDS Faculty members and was offered to MBA students

Academic Conference Program Committee

2007	Local Host and Chairman, The First NSF LIKES Workshop (Santa Clara University)
2006	The Fifth Annual Workshop on HCI Research in MIS (Milwaukee)
2006	IEEE International Conference on Intelligence and Security Informatics (San Diego)
2005	IEEE International Conference on Intelligence and Security Informatics (Atlanta)

Refereed Journal Reviewer

2008	Management Information Systems Quarterly (1 article)
2004 - 2008	Journal of Management Information Systems (9 articles)
2006, 2008	International Journal of Electronic Commerce (3 articles)

2006 Enterprise Information Systems (1 article)
 2006 IEEE Transactions on Systems, Man, and Cybernetics - Part C (1 article)
 2005 IEEE Transactions on Systems, Man, and Cybernetics - Part A (1 article)
 2004 ACM Journal on Educational Resources in Computing (1 article)
 2004 IEEE Transactions on Neural Networks (1 article)
 2002 - 2008 Decision Support Systems (9 articles)
 2003 - 2008 ACM Transactions on Information Systems (4 articles)
 2003 - 2004 Journal of the American Society for Information Science and Technology (6 articles)
 2003 Presence: Teleoperators & Virtual Environments (The MIT Press) (1 article)

Refereed Conference Reviewer

2002, 2006 International Conference on Information Systems (2 articles)
 2004 The Eighth International Conference on Information Visualization (1 article)
 2003 - 2008 International Conference on Intelligence and Security Informatics (19 articles)
 2002, 2003 ACM/IEEE Joint Conference on Digital Libraries (4 articles)
 2002, 2003 IEEE/WIC International Conference on Web Intelligence (4 articles)
 2002, 2003 European Conference on Digital Libraries (6 articles)
 2001, 02, 03 International Conference on Asian Digital Libraries (4 articles)
 2003 Workshop on Information Technology and Systems (1 article)
 2003 IEEE International Conference on Data Mining (1 article)
 2003 IEEE/WIC International Conference on Web Intelligence (1 article)
 2002, 2005 Hawaii International Conference on System Sciences (2 articles)
 2002 The International Conference of Digital Library (Beijing) (4 articles)

Textbook Reviewer

2008 Hoffer, Prescott, and Topi. "Modern Database Management, 9/e," Prentice Hall.
 2006 Connolly, Begg, and Holwczak "Business Database Systems," Addison Wesley.
 2005 Lewis & Loftus "Java Software Solutions, 5/e," Addison Wesley.
 2005 Turban & Aronson "Decision Support Systems, 8/e," Prentice Hall.

10. PROFESSIONAL MEMBERSHIPS

2000 - now Association for Computing Machinery
 2000 - now IEEE Computer Society
 2003 - now Association for Information Systems
 2005 - 2007 Academy of Management
 2007 - now The Institute for Operations Research and the Management Sciences

11. HONORS AND AWARDS

Aug. 2007 **National Science Foundation Grant Award**, "Living in the KnowlEdge Society (LIKES) Community Building Project," \$70,000 awarded to SCU (\$498,957 in total shared among four institutions).

Apr. 2007 **Outstanding Performance Award**, presented by the UTEP Vice-President of Research.

Jul-Sep 2006 Publication titled "Studying information seeking on the non-English Web: An experiment on a Spanish business Web portal" ranked among the **top 25 most downloaded papers** of the *International Journal of Human-Computer Studies*, a top-tier journal in the information systems discipline.

Jun. 2006 Included in **Marquis Who's Who in America Science and Engineering, 2007**.

Apr. 2006 **Best Research Paper (CIS) Award**, by the Dean of UTEP College of Business Admin.

Apr. 2006 **Outstanding Performance Award**, presented by the UTEP President to the IDS Department for the most research grant activities in the college.

Jan-Mar 2006 Publication titled "Fighting cybercrime: a review and the Taiwan experience" ranked among the **top 25 most downloaded papers** of *Decision Support Systems*, a top-tier journal in the information systems discipline.

Aug. 2005 Included in **The 60th Marquis Who's Who in America, 2006** and **The 7th Marquis Who's Who in America Education, 2006**.

Apr. 2005 Classified as an "**Outstanding Professor / Researcher**" by the Department of Homeland Security, The United States Government.

Nov. 2004 Nominated by UTEP Provost for **Microsoft New Faculty Fellowship Award**.

Oct. 2003 **Young Investigators Initiative Award** offered by the US Defense Advanced Research Projects Agency (DARPA).
2000 – 2004 **Graduate assistantship**, Dept of MIS, University of Arizona.
Dec. 2003 **Conference travel stipend**, Dept of MIS, University of Arizona.
Sep. 1999 **Scholarship Award**, M.S. Program in IT Mgmt, The Chinese University of Hong Kong.
Sep. 1999 Finalist, the **Rotary International Foundations Ambassadorial Scholarship**.
July 1998 Certificate of Registration as a teacher, Hong Kong Govt. Education Dept.

Last updated on January 9, 2009.