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Education

Kansas State University, **Ph.D.**, Computer Science, June 1991.
Brigham Young University, **M.S.**, Computer Science, December 1984.
Brigham Young University, **B.S.**, Computer Science, August 1982.

Professional Positions

- Brigham Young University, Associate Professor of Computer Science, September 1997 - Present.
- Brigham Young University, Assistant Professor of Computer Science, September 1991 - August 1997.

Publications

- Journals
 1. Yiu-Kai Ng, “Read to Grow: Exploring Metadata of Books to Make Intriguing Book Recommendations for Teenage Readers”, *Knowledge and Information Systems, An International Journal (KAIS)*, Volume 65, Issue 11, pp. 4537-4562, Springer, November 2023.
 2. Sophie Gao and Yiu-Kai Ng, “Generating Extractive Sentiment Summaries for Natural Language User Queries on Products”. *Journal of ACM Applied Computing Review (ACR)*, Volume 22, Issue 2, pp. 5-20, ACM, June 2022.
 3. Yiu-Kai Ng, “CBRec: A Book Recommendation System for Children Using the Matrix Factorization and Content-Based Filtering Approaches”. *International Journal of Business Intelligence and Data Mining (IJBIDM)*, Volume 16, Number 2, pp. 129-149, InderScience, 2020.
 4. Joseph Bills and Yiu-Kai Ng, “Recommending Therapeutic Games Targeted to the Individual Needs of Adults with Autism Spectrum Disorder”. *International Journal on Computer Sciences and Information Systems (IJCSIS)*, Volume 14, Number 1, pp. 53-69, IADIS Press, December 2019.
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7. Yiu-Kai Ng, "MovReC: A Personalized Movie Recommendation System for Children Based on Online Movie Features". *International Journal of Web Intelligence Systems (IJWIS)*, Volume 13, Number 4, pp. 445-470, Emerald, 2017.
8. Rani Qumsiyeh and Yiu-Kai Ng, "Searching Web Documents Using a Summarization Approach". *International Journal of Web Information Systems (IJWIS)*, Vol. 12, Issue 1, pp. 83-101, Emerald Group Publishing Ltd., 2016.
9. Rani Qumsiyeh and Yiu-Kai Ng, "Enhancing Web Search Using Query-Based Clusters and Multi-Document Summaries". *Journal of Knowledge and Information Systems (KAIS)*, Vol. 47, Issue 2, pp. 355-380, Springer, 2016.
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12. Maria Soledad Pera and Yiu-Kai Ng, "Exploiting the Wisdom of Social Connections to Make Personalized Recommendations on Scholarly Articles". *Journal of Intelligent Information Systems (JIIS)*, Springer, 2014.
13. Maria Soledad Pera and Yiu-Kai Ng, "A Group Recommender for Movies Based on Content Similarity and Popularity." *Journal of Information Processing & Management (IPM)*, Vol. 49, Issue 3, pp. 673-687, Elsevier, May 2013.
14. Maria Soledad Pera, Rani Qumsiyeh, and Yiu-Kai Ng, "Web-Based Closed-Domain Data Extraction on Online Advertisements." *Journal of Information Systems*, Vol. 38, Issue 2, pp. 183-197, Elsevier, April 2013.
15. Maria Soledad Pera and Yiu-Kai Ng, "Using Maximal Spanning Trees and Word Similarity to Generate Hierarchical Clusters of Non-Redundant RSS News Articles." In *Journal of Intelligent Information Systems (JIIS)*, Vol. 39, No. 2, pp. 513-534, Springer, October 2012.
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27. Jerry Gao, Dallan Quass, and Yiu-Kai Ng, "Selective-Splitting and Cache-Maintenance Algorithms for Associative-Client Caches," *Journal of Distributed and Parallel Databases*, Volume 16, Number 1, July 2004, pp. 5-43, Kluwer Academic Publishers.
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- Book Chapters
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 2. Yiu-Kai Ng, “Movie Recommendation Based on a Recurrent Neural Network Model”. In *Reuse in Intelligent Systems*, pp. 87-115, CRC Press, July 2020.
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- Workshop Proceedings

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- Conference Proceedings
 1. Siqi Gao and Yiu-Kai Ng, “Recommending Answers to Math Questions Based on KL-Divergence and Approximate XML Tree Matching”, to appear in *Proceedings of the 2023 ACM SIGIR Conference on Research and Development in Information Retrieval within the Asia-Pacific Region (SIGIR-AP)*, November 26-29, 2023, Beijing, China.
 2. Yiu-Kai Ng, “Easy to Find: A Natural Language Query Processing System on Advertisements Using an Automatically Populated Database”, In *Proceedings of the 19th International Conference on Web Information Systems and Technologies (WEBIST)*, pp. 71-83, November 15-17, 2023, Rome, Italy, 2023.
 3. Yiu-Kai Ng, “Personalized Book Recommender System for Adults Based on Deep Learning and Filtering”, in *Proceedings of the 15th International Conference on Knowledge Discovery and Information Retrieval (KDIR)*, IC3K, pp. 248-256, November 13 - 15, 2023, Rome, Italy, 2023.
 4. Matthew Moulton, Sophie Gao, and Yiu-Kai Ng, “Retrieving and Ranking Relevant Products from Boolean Natural Language Queries”. In *Proceedings of the 21st International Conference on Web Intelligence and Intelligent Agent Technology (IEEE/WIC/ACM WI-IAT)*, pp. 303-308, Niagara Falls, Canada, November 17-20, 2022.
 5. Nathaniel Benham, Sophie Gao, and Yiu-Kai Ng, “A Hybrid Approach for Summarizing User Reviews Based on KL-Divergence and Deep Learning”. In *Proceedings of the 34th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, pp. 325-333, October 31 - November 2, 2022.
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14. Alisha Banskota and Yiu-Kai Ng, “Recommending Video Games to Adults with Autism Spectrum Disorder for Social-Skill Enhancement”. In *Proceedings of the 28th ACM Conference on User Modeling, Adaptation and Personalization (UMAP)*, pp. 14-22, July 14-17, Genoa, Italy, 2020.
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16. Eric Brewer and Yiu-Kai Ng, “Age-Suitability Prediction for Literature Using a Recurrent Neural Network Model”. In *Proceedings of the 31st IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2019)*, pp. 1592-1596, Portland, Oregon, November 4-6, 2019.

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18. Eric Brewer, Yiu-Kai Ng, and Alisha Banskota, "Personalized Scholarly Article Recommendations Based on the Recurrent Neural Network and Probabilistic Models". In *Proceedings of the 9th International Conference on Internet Technologies & Society (ITS 2019)*, pp. 11-18, Hong Kong, February 8-10, 2019.
19. Andrew Luke, Joseph Johnson, and Yiu-Kai Ng, "Recommending Long-Tail Items Using Extended Tripartite Graphs". In *Proceedings of the IEEE International Conference on Big Knowledge (IEEE ICBK 2018)*, pp. 123-130, Singapore, November 17-18, 2018.
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21. Jeffrey Lund and Yiu-Kai Ng, "Movie Recommendations Using the Deep Learning Approach", In *Proceedings of the IEEE 19th International Conference on Information Reuse and Integration for Data Science (IEEE IRI)*, pp. 47-54, Salt Lake City, Utah, July 7-9, 2018.
22. Alisha Banskota and Yiu-Kai Ng, "A Graduate School Recommendation System Using the Multi-Class Support Vector Machine and KNN Approaches". In *Proceedings of the IEEE 19th International Conference on Information Reuse and Integration for Data Science (IEEE IRI)*, pp. 277-284, Salt Lake City, Utah, July 7-9, 2018.
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24. Yiu-Kai Ng and Iris Seaman, "Personalized Table-Top Game Recommendations". In *Proceedings of the 29th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2017)*, pp. 396-403, Boston, Massachusetts, November 6-8, 2017.
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26. Yiu-Kai Ng and Jane Linn, "CrsRecs: A Personalized Course Recommendation System for College Students". To appear in *Proceedings of the 8th International Conference on Information, Intelligence, Systems, and Applications (IISA 2017)*, Larnaca, Cyprus, August 28-30, 2017.

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(*ACM RecSys*), *Poster Session*, Foster City, Silicon Valley, CA, October 6, 2014.

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66. Rajiv Yerra and Yiu-Kai Ng, "Detecting Similar HTML Documents Using a Fuzzy Set Information Retrieval Approach," in *Proceedings of the IEEE International Conference on Granular Computing (IEEE GrC'05)*, IEEE Press, pp. 693-699, Beijing, China, July 2005.
67. SeungJin Lim and Yiu-Kai Ng, "Categorization and Information Extraction of Multilingual HTML Documents," in *Proceedings of the 9th International Database Engineering and Application Symposium (IDEAS'05)*, IEEE Computer Society, pp. 415-422, Montreal, Canada, July 2005.
68. Nathaniel Gustafson, SeungJin Lim, and Yiu-Kai Ng, "Categorization of Web Documents Using Character Encodings," in *Proceedings of the 2005 International Conference on Digital Archive Technologies (ICDAT 2005)*, pp. 175-189, Taipei, Taiwan, June 2005.

69. SeungJin Lim and Yiu-Kai Ng, "Change Discovery of Hierarchically Structured, Order-Sensitive Data in HTML/XML Documents," in *Proceedings of the 2004 International Symposium on Applications and the Internet (SAINT 2004)*, pp. 178-187, IEEE Computer Society, Tokyo, Japan, January 2004.
70. Xiaochun Yang, Bin Wang, and Yiu-Kai Ng, "A Protein Secondary Structure Prediction Framework Based on the Support Vector Machine," in *Proceedings of the Fourth International Conference on Web-Age Information Management (WAIM 2003)*, pp. 266-277, LNCS 2762, Chengdu, China, August 2003.
71. Kelvin Lau and Yiu-Kai Ng, "A Client-Based Web-Cache Management System," in *Proceedings of the Third International Conference on Web-Age Information Management (WAIM'02)*, pp. 379-386, LNCS 2419, Beijing, China, August 2002.
72. Seung-Jin Lim, Yiu-Kai Ng, and Xiaochun Yang, "Integrating HTML Tables Using Semantic Hierarchies and Meta-Data Sets," in *Proceedings of the International Database Engineering and Applications Symposium (IDEAS'02)*, pp. 160-169, IEEE Computer Society, Edmonton, Canada, July 2002.
73. D.W. Embley, Yiu-Kai Ng, and Li Xu, "Recognizing Ontology-Applicable Multiple-Record Web Documents," in *Proceedings of the 20th International Conference on Conceptual Modeling (ER 2001)*, pp. 555-570, Yokohama, Japan, November 2001.
74. Seung-Jin Lim and Yiu-Kai Ng, "An Automated Integration Approach for Semi-Structured and Structured Data," in *Proceedings of the 3rd International Symposium on Cooperative Database Systems for Advanced Applications (CODAS'01)*, pp. 15-24, Beijing, China, April 2001.
75. June Tang, Yiu-Kai Ng, and Michael Goodrich "A Binary-Categorization Approach for Recognizing Multiple-Record Web Documents Using Application Ontologies and A Probabilistic Model," in *Proceedings of the 7th International Conference on Database Systems for Advanced Applications (DASFAA 2001)*, pp. 58-65, April 2001.
76. Seung-Jin Lim and Yiu-Kai Ng, "An Automated Change-Detection Algorithm for HTML Documents Based on Semantic Hierarchies," in *Proceedings of the 17th International Conference on Data Engineering (ICDE 2001)*, pp. 303-312, Heidelberg, Germany, April 2001.
77. Seung-Jin Lim and Yiu-Kai Ng, "A Heuristic Approach for Converting HTML Documents to XML Documents," in *Proceedings of the Sixth International Conference on Rules and Objects in Databases (DOOD 2000)*, pp. 1182-1196, London, U.K., July 2000.
78. Seung-Jin Lim and Yiu-Kai Ng, "SemiLog: A Logic-Based Query Language for Hierarchical Data in Web Documents," in *Proceedings of the International Conference on Internet Applications*, pp. 109-120, Hong Kong, December 1999.
79. Seung-Jin Lim and Yiu-Kai Ng, "An Automated Approach for Retrieving Hierarchical Data from HTML Tables," in *Proceedings of the Eighth International Conference on Information and Knowledge Management (ACM CIKM'99)*, pp. 466-474, Kansas City, MO., November 1999.

80. David W. Embley, Yang Jiang, and Yiu-Kai Ng, "Record-Boundary Discovery in Web Documents," in *Proceedings of the ACM International Conference on Management of Data (SIGMOD'99)*, pp. 467-478, June 1999, Philadelphia, PA.
81. Seung-Jin Lim and Yiu-Kai Ng, "WebView: A Tool for Retrieving Internal Structures and Extracting Information from HTML Documents," in *Proceedings of the 6th International Conference on Database Systems for Advanced Applications (DASFAA'99)*, pp. 71-80, April 1999, Taipei, Taiwan.
82. Seung-Jin Lim and Yiu-Kai Ng, "Constructing Hierarchical Information Structures of Sub-Page Level HTML Documents," in *Proceedings of the 5th International Conference of Foundations of Data Organization (FODO'98)*, pp. 66-75, Kobe, Japan, November 1998.
83. D.W. Embley, D.M. Campbell, Y.S. Jiang, Y.-K. Ng, R.D. Smith, S.W. Liddle and D.W. Quass, "A Conceptual-Modeling Approach to Extracting Data from the Web," in *Proceedings of the 17th International Conference on Conceptual Modeling (ER'98)*, pp. 78-91, Singapore, November 1998.
84. Aparna Seetharaman and Yiu-Kai Ng, "A Model-Forest Based Horizontal Fragmentation Approach for Disjunctive Deductive Databases," in *Proceedings of the International Database Engineering & Applications Symposium (IDEAS'98)*, pp. 202-211, IEEE Computer Society, July 1998, Cardiff, Wales.
85. Seung-Jin Lim and Yiu-Kai Ng, "Extracting Structures of HTML Documents," in *Proceedings of the 12th International Conference on Information Networking (ICOIN-12)*, pp. 420-426, January 1998, Tokyo, Japan.
86. Aparna Seetharaman and Yiu-Kai Ng, "A Formal Approach for Horizontal Fragmentation of Disjunctive Deductive Databases," in *Proceedings of the 8th International Conference on Management of Data (COMAD'97)*, pp. 293-310, December 1997, Madras, India.
87. Yiu-Kai Ng and Aparna Seetharaman, "A Query-Based Horizontal Fragmentation Approach for Disjunctive Deductive Databases," in *Proceedings of the 8th International Conference and Workshop on Database and Expert Systems Applications (DEXA'97)*, pp. 604-609, September 1997, Toulouse, France.
88. Aparna Seetharaman and Yiu-Kai Ng, "A Minimal-Model Based Horizontal Fragmentation Algorithm for Disjunctive Deductive Databases," in *Proceedings of the International Database Engineering and Applications Symposium (IDEAS'97)*, pp. 94-103, IEEE Computer Society, August 1997, Montreal, Canada.
89. Seung-Jin Lim and Yiu-Kai Ng, "Design and Analysis of Parallel Set-term Unification," in *Proceedings of the Third Annual International Computing and Combinatorics Conference (COCOON'97)*, pp. 321-330, August 1997, Shanghai, China, LNCS 1276.
90. Seung-Jin Lim and Yiu-Kai Ng, "A Formal Approach for Horizontal Fragmentation in Distributed Deductive Database Design," in *Proceedings of the 7th International Conference on Database and Expert Systems Applications (DEXA 96)*, pp.

604-609, September 1996, Zurich, Switzerland.

91. David Embley, Stephen Liddle and Yiu-Kai Ng, "On Harmonically Combining Active, Object-Oriented, and Deductive Databases," in *Proceedings of the Third International Workshop on Advances in Databases and Information Systems (AD-BIS'96)*, pp. 21-30, September 1996, Moscow, Russia.
92. Seung-Jin Lim and Yiu-Kai Ng, "Rule and Data Allocation in Distributed Deductive Database Systems," in *Proceedings of the 8th International Conference of Computing and Information (ICCI'96)*, pp. 979-1000, June 1996, Toronto, Canada.
93. Yiu-Kai Ng and Nael Qaraeen, "Data Retrieval and Aggregates in SQL^*/NR ," in *Proceedings of the Sixth International Conference on Information Systems and Management of Data (CISMOD'95)*, pp. 283-301, November 1995, Bombay, India, LNCS 1006.
94. Seung-Jin Lim and Yiu-Kai Ng, "Set-Term Unification in a Logic Database Language," in *Proceedings of the First Annual International Computing and Combinatorics Conference (COCOON'95)*, pp. 101-110, August 1995, Xian, China, LNCS 959.
95. Seung-Jin Lim and Yiu-Kai Ng, "Set-Term Matching in a Logic Database Language," in *Proceedings of the 4th International Conference on Database Systems for Advanced Applications (DASFAA '95)*, pp. 189-196, April 1995, Singapore.
96. Qing Chang and Yiu-Kai Ng, "Built-in Predicates for Extended Relational Algebra Operations in a Logic Database Language (Summary)," in *Proceedings of the First Joint Conference on Information Sciences (JCIS94)*, pp. 96-99, November 1994, Pinehurst, North Carolina.
97. Yiu-Kai Ng and Qing Chang, "An Efficient Unification Algorithm for a Logic Database Language for Nested Relations," in *Proceedings of the 5th International Conference on Information Systems and Management of Data (CISMOD'94)*, pp. 34-52, October 1994, Madras, India.
98. Wai-Yin Mok, David Embley, and Yiu-Kai Ng, "Theoretical and Practical Implications of a New Definition for Nested Normal Form," in *Proceedings of the 5th International Conference on Information Systems and Management of Data (CISMOD'94)*, pp. 55-75, October 1994, Madras, India.
99. Wai Yin Mok, Yiu-Kai Ng, and David Embley, "An Improved Nested Normal Form for Use in Object-Oriented Software Systems," in *Proceedings of the Second International Computer Science Conference: Data and Knowledge Engineering: Theory and Applications*, pp. 446-452, December 1992, Hong Kong.
100. Yiu-Kai Ng, "Semantic Constraints on the Connections Among Tuple Components in Non-Normal-Form Models," in *Proceedings of the 19th ACM Annual Computer Science Conference*, pp. 311-320, March 1991, San Antonio, Texas.
101. Yiu-Kai Ng, Austin Melton, and Elizabeth Unger, "A Method for Constructing Generalized Non-Normal-Form Models," in *Proceedings of the 19th ACM Annual Computer Science Conference*, pp. 146-152, March 1991, San Antonio, Texas.

102. Yiu-Kai Ng and David Embley, “The Retrieval Power of NFQL,” in *Proceedings of the 17th ACM Annual Computer Science Conference*, pp. 62-69, February 1989, Louisville, Kentucky.

Teaching Experience (Computer Science Classes Taught)

| | | | |
|---------|----------------------------|---------|---------------------------------------|
| CS 153 | Discrete Mathematics | CS 252 | Introduction to Computational Theory |
| CS 353 | Database Modeling Concepts | CS 451 | Database Concepts |
| CS 452 | Database Design Concepts | CS 453 | Fundamentals of Information Retrieval |
| CS 501R | Logic Programming | CS 653 | Information Retrieval |
| CS 554 | Distributed Databases | CS 501R | Deductive Databases |

Research Interests

Question-Answering Systems
Web Query Processing

Information Retrieval
Recommender Systems

Graduate Students

- Current Graduate Students
 - Sophie Gao, “Answering Math Questions Using KL-Divergence and the Approximate XML Tree Matching Approach”, Active.
- Former Graduate Students
 - Joseph Bills, “Enhancing the Opportunities for Adults with Autism to Find Jobs Using a Job-Matching Algorithm”, June 2022.
 - Eric Brewer, “Age-Suitability Prediction for Literature Using Deep Neural Networks”, July 2020.
 - Alisha Banskota, “Recommending Games to Adults with Autism Spectrum Disorder (ASD) for Skill Enhancement Using *Minecraft*”, October 2019.
 - Maria Soledad Pera (Ph.D.), “Using Online Data Sources to Make Recommendations on Reading Materials for K-12 and Advanced Readers”, April 2014.
 - Rani Qumsiyeh, “Easy to Find: Creating Query-Based Multi-document Summaries to Enhance Web Search”, April 2011.
 - Maria Soledad Pera (M.S.), “Improving Library Searches Using Word-Correlation Factors and Folksonomies”, April 2009.
 - Ian Garcia, “Eliminating Redundant and Less-Informative RSS News Articles Based on Word Similarity and a Fuzzy Equivalent Relation” January 2007.
 - Amit Ahuja, “A Dynamic Attribute-Based Load-Shedding and Data Recovery Scheme for Data Stream Management Systems,” July 2006.
 - Rajiv Yerra, “Detecting Similar HTML Documents Using a Sentence-Based Copy Detection Approach” (thesis completed and graduated), July 2005.

- Lihua Zhang, “Retrieving Information from Tables in Chinese HTML Documents Using a Chinese Query Engine” (thesis submitted and graduated), December 2002.
- Seung-Jin Lim (Ph.D.), “Semantic Hierarchies of HTML Documents and Their Applications” (dissertation submitted and graduated), November 2001.
- Quan Wang, “A Binary-Categorization Approach for Classifying Multiple-Record Web Documents Using a Probabilistic Retrieval Model,” (thesis submitted and graduated), November 2001.
- Jiaxin Jerry Gao, “Study and Implementation of Selective Splitting Algorithms and Cache Maintenance Algorithms in Associative Client Cache” (thesis submitted and graduated), November 2001.
- Kelvin Lau, “A Client-based Web Cache Management System with Prefetching Schedules” (thesis submitted and graduated), October 2000.
- Linus Kwong, “Automatic Categorization of Multiple-Record Web Documents Based on Application Ontologies and Information Retrieval Models” (thesis submitted and graduated), July 1999.
- Yuan Jiang, “Record-Boundary Discovery in Web Documents” (thesis submitted and graduated), December 1998.
- Cesar Bustamante, “A Formal Approach to Hybrid Fragmentation of Distributed Deductive Database Systems” (thesis proposal approved - December 1997).
- Tim Johnson, “Efficient Query Evaluation Strategies for *LDL/NR*” (thesis submitted and graduated), October 1997.
- Aparna Seetharaman, “Formal Approaches for Horizontal Fragmentation of Disjunctive Deductive Databases” (thesis submitted and graduated), August 1996.
- Nael Qaraeen, “*SQL*/NR*: A Recursive Query Language for Nested Relations” (thesis submitted and graduated), July 1995.
- Seung-Jin Lim, (M.S.) “Set-term Unification in a Logic Database Language” (thesis submitted and graduated), December 1994.
- Qing Chang, “A Logic Database Language for Nested Relations in Partition Normal Form” (thesis submitted and graduated), December 1993.

Current Undergraduate Students

- Nathaniel Benham, Senior in Computer Science
- DJ Kim, Junior in Computer Science

Special Awards

- The paper, “A Hybrid Approach for Summarizing User Reviews Based on KL-Divergence and Deep Learning”, co-authored by me, Nathaniel Benham and Sophie

Gao, was selected for the *Best Student Paper Award* by the program committee chairs of the 34th IEEE International Conference on Tools with Artificial Intelligence (ICTAI).

- The paper, “Targeting Therapeutic Games to Adults with Autism Spectrum Disorder,” co-authored by me and Joseph Bills, was selected for the *Outstanding Paper Award* by the International International Conference on Internet Technologies & Society (ITS 2019).
- The paper, “Personalized Recipe Recommendations for Toddlers Based on Nutrient Intake and Food Preferences”, co-authored by me and Meilan Jin, was selected by the 9th International ACM Conference on Management of Digital EcoSystems (MEDES’17) for the *Best Paper Award*.
- Our ICDE’01 paper, “An Automated Change-Detection Algorithm for HTML Documents Based on Semantic Hierarchies,” co-authored by me and my graduate student, Seung-Jin Lim, was selected for the *Best Student Paper Award* at ICDE’01 International conference, April 2001.
- Seung-Jin Lim’s master’s thesis was selected as the *outstanding master’s thesis* for the College of Physical and Mathematical Sciences for 1994-95.

Citizenship and Service

(a) **BYU**

- Department - Members of the following department committees:
 - *Department Promotion, Raise, & Leave Committee*, September 2021 - present.
 - *Department Internship Coordinator*, September 2006 - present.
 - *Student Research Conference (SRC) Department Coordinator*, September 2017 - present.
 - *Graduate Committee*, September 2011 - August 2018.
 - *Computer Merit-Badge Coordinator*, BYU Boy Scouts Pow-wow, September 2001 - August 2016.
 - College: Reviewer of *BYU ORCA Mentoring Grant Proposals*, September 2003 - August 2015.
 - *Undergraduate Scholarship Representative*, August 1999 - July 2002.
 - *Recruitment Committee*, August 1997 - July 1999.
 - *Promotion, Tenure, and Leave Committee*, August 1997 - August 1999.
 - *Computing/Capital Equipment & Undergraduate Curriculum Committees*, August 1996 - August 1997.
 - *Graduate Admissions Committee*, September 1995 - August 1996.

- *Graduate Affairs & Admissions Committee*, September 1993 - August 1996.
- *Promotion & Tenure Committee*, September 1992 - August 1993.
- University
 - Advisor of the *Hong Kong Student Association*, April 1992 - August 1995, September 2021 - Present.
 - Member of the *Pre-medical Committee*, February 1998 - April 2000.
 - Member of the *BYU Self-Study Task Force Committee on International LDS Graduate Students at BYU*, March 1995 - April 1995.

(b) **Professional**

- Editorships on professional journals
 - (a) Associate Editor of the *International Journal of Web Information Systems*, Emerald Publishing, 2017 - Present.
 - (b) Review an article, “Detecting News Scrap Using Sentence Level Approach for Duplicate Document Detection,” submitted to the *ETRI Journal*. September 25, 2009.
 - (c) Refereed an article “Web Change Detection with CDweb,” submitted to *Journal of Information Systems*, January 7, 2002.
 - (d) Refereed an article “A Methodology to Vertical Partitioning for a Multi-Relation Database Environment,” submitted to *IEEE Transactions on Knowledge and Database Engineering (KDE)*, October 25, 2001.
 - (e) Refereed an article “Fast Text and Image Retrieval in Combination: a Feasibility Demonstration,” submitted to *WISE 2001*, September 21, 2001.
 - (f) Refereed an article “Managing the Information Retrieved from Knowledge Portals,” submitted to the *ACM Tenth International Conference on Information and Knowledge Management (CIKM 2001)*, July 10, 2001.
 - (g) Refereed an article “Nesting-Based Relational-to-XML Schema Translation,” submitted to the *Fourth International Workshop on the Web and Databases (WebDB’2001)*, March 30, 2001.
 - (h) Refereed an article “Logical Structure Analysis for Structured Document Generation: A Syntactic Approach,” submitted to *IEEE Journal of Knowledge and Data Engineering (IEEE-KDE)*, November 30, 2000.
 - (i) Refereed five articles submitted to the 17th *International Symposium on Database Systems for Advanced Applications (DASFAA’01)*, November 2000.
 - (j) Refereed six articles submitted to the *2000 ADBIS-DASFAA International Conference*, September 2000.

- (k) Refereed an article “Flexible and Modular Semi-Structured Data Model,” submitted to the 1st *International Conference on Web Information Systems Engineering (WISE 2000)*, April 21, 2000.
- (l) Refereed two articles submitted to the *International Workshop on the World-Wide Web and Conceptual Modeling (WWWCM'99)*, Paris, France, November 15-18, 1999.
- (m) Refereed an article “A Practical Approach to Dynamic Horizontal Fragmentation of Database Object Classes” submitted to *The Computer Journal*, November 8, 1999.
- Conference organization involvement
 - (a) Program Committee Member of the *ACM SIGIR*, *ACM TheWebConf*, and *ACM RecSys*, 2020 - Present.
 - (b) Program Committee Member of the *International Database Engineering & Applications Symposium (IDEAS)*, 2006 - Present.
 - (c) Program Committee Member of the 3rd *International Workshop on Web Information and Data Management (WIDM'01)*, November 9, 2001.
 - (d) Program Committee Member of the 17th *International Symposium on Database Systems for Advanced Applications (DASFAA'01)*, April 18-20, 2001.
 - (e) Program Committee Member of the 2000 *International Symposium on Advances in Databases and Information Systems and Database Systems for Advanced Applications (ADIS-DASFAA'00)*, September 5-8, 2000.
 - (f) Organizing Committee Member (Registration) of the 19th *International Conference on Conceptual Modeling (ER'2000)*, October 9-12, 2000.
- Professional organization service
 - Chair the Technical Session—Information Retrieval—at the 21st *IEEE International Conference on Tools with Artificial Intelligence (IEEE ICTAI 2009)*, November 4, 2009, Newark, New Jersey.
 - Served as the Session Chair of the *Queries and Security* session at the 9th *International Database Engineering and Applications Symposium (IDEAS'05)*, Montreal, Canada, July 27, 2005.
 - Served as the Session Chair of the *Heterogeneous & Network Databases* session at the 7th *International Conference on Database Systems for Advanced Applications (DASFAA 2001)*, April 10, 2001.
 - Served as the Session Chair of the *Information Retrieval* session at the *International Conference on Internet Applications*, December 15, 1999.
- Invited Lectures

- “Detecting Similar Web Documents Using a Fuzzy Set Information Retrieval Approach,” *Computer Science Colloquia*, China Northeastern University, Shenyang, China, July 22, 2005.
- “Semantic Hierarchies of HTML Documents and Their Applications,” *Computer Science Department Colloquia*, Kent State University, Kent, Ohio, March 22, 2002.
- “Databases,” MFET 591R, *Graduate Seminar*, Department of Manufacturing Engineering & Engineering Technology, Brigham Young University, November 27, 1995.
- “An Improved Normal Form for Nested Relations,” *Computer Science Department Colloquia*, Michigan Technological University, Houghton, Michigan, August 19, 1993.

Professional Memberships

- Member of the Association for Computing Machinery (ACM)