TEXAS STATE VITA

Please note: For all entries, list most recent items first.

I. Academic/Professional Background

A. Name: Anne Hee H. Ngu Title: Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
Ph.D.	1990	University of Western Australia	Computer Science	Data Modeling
B.Sc. (Honors)	1982	University of Western Australia	Computer Science	Program Generation
B.Sc.	1981	University of Western Australia	Science	

C. University Experience

Position	*University*	*Dates*
Professor	Texas State University-San Marcos	2010-present
Associate Professor	Texas State University-San Marcos	2002-2010
Adjunct Associate Professor	University of New South Wales, Australia	2003-2006
Senior Lecturer	University of New South Wales, Australia	1995-2000
Lecturer	University of New South Wales, Australia	1992-1995
Teaching Assistant	University of Western Australia, Australia	1986-1988

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Faculty Scholar	Lawrence Livermore National Laboratory	Summer 2003-2006
Research Scientist	Telcordia Technologies (formerly Bellcore)	2000-2001
Senior Technical Staff	Microelectronics and Computer Technology (MCC)	6/2000-7/2000
Visiting Scientist	Microelectronics and Computer Technology (MCC)	2/1998-7/1998
ITK Research Fellow	Tilburg University, Netherlands	1/1993-3/1993
Associate Research Staff	Institute of Systems Science, Singapore	1989-1992
Programmer	National Semiconductor Asia Pacific, Singapore	1983-1985

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:

B. Courses Taught:

- Object Oriented Design and Implementation (CS4354) at **Texas State**: Topics include model-driven architecture, design patterns, event handlings and concurrency.
- Web Services Engineering (CS5369G) at **Texas State**: Topics include dynamic services integration, WSDL, SOAP, UDDI and research topics in Web service discovery and composition. Offered as an ITV class from Spring 2006.
- Enterprise Application Integration (CS5376) at **Texas State**: Topics include approaches for rapid Business to Business (B2B) integration and enabling technologies such as J2EE, XML, JMS, JDBC, JSP, workflows and mashup. Offered as an ITV class from Spring 2003.
- Database Theory and Design (CS5332) at **Texas State**: Topics include ER design, ODL, Relational Model, Advanced Database Design, SQL and PL/SQL. A graduate core course. Offered as ITV class from Spring 2003.
- Introduction to Database Systems (CS4332) at **Texas State**: Topics include logical database theory and design, implementation of SQL queries, and DBMS architecture.
- Database Systems (COMP3311) at University of New South Wales (UNSW): Topics included logical design, physical design, and implementation using Oracle Forms and Report. Student numbers ranged from 200-300. This was a core undergraduate course for the Software Engineering degree.
- Database Systems and Implementation (COMP9315) at UNSW: Topics included query optimization, storage management, concurrency control and Oracle performance tuning; and, implementation of query optimizers using the Volcano optimizer generator. A graduate course. Student numbers ranged from 50-100.
- Next-generation databases (COMP9314) at UNSW: Topics included object-oriented design, UML, object-oriented databases, distributed databases and web databases; and, implementation of electronic commerce applications using Object Store, Servlet, and the Apache Web-Server. A graduate course. Student numbers ranged from 50-200.
- Database Systems (COMP9804) at UNSW: This was the first distance learning database class offered at School of Computer Science and Engineering at UNSW. A core graduate course. Student numbers ranged from 20-30.
- Computing 1B (COMP1021) at UNSW, a first year procedural programming language course. Students numbers were around 300.
- Prolog Programming (CS100) at University of Western Australia (UWA), a first year computer science logic programming language course. Student numbers were around 200.

C. Graduate Theses/Dissertations or Exit Committees (if supervisor, please indicate):

- Supervisor, six master theses at **Texas State**
- Member, seven master theses at **Texas State**
- Supervisor, five graduate independent study projects (Nicholas Haasch, Wang Xuan, Calvin Carter, Tianyi Yang, Sushma Channamsetty) at **Texas State** (secured an internship for Nicholas at Lawrence Livermore National Laboratory and published one joint paper)
- Supervisor, one research assistant (Arwa Jamnagarwala) at **Texas State** on Context-Aware Scientific Workflows
- Supervisor, two PhD theses at UNSW
- Co-supervisor, three PhD theses at UNSW
- Co-supervisor three PhD theses at Adelaide University, Australia
- Supervisor, three master theses at UNSW
- Supervisor, 12 independent study projects at UNSW

List of Graduate Thesis Supervised:

Institution	**Year**	**Name**	**Thesis Topic**	**Type**
Texas State	2015	Clark Phillips	Employing a scalable implementation of the cost sensitive alternating decision tree algorithm to efficiently link person records	Master
Texas State	2011	Seth R. Orell Jr.	Semantic News Analysis and Prediction	Master
Texas State	2008	Michael P. Carlson	Experimental study on the use of Semantic Web Concepts for Matching and Assembling of Rich Client Composite Applications (Papers published: 1)	Master
Texas State	2005	Zhitong Zhao	Dynamic Invocation of Web Services (Papers published: 1)	Master
UNSW (Co-Supervisor)	2005	Jialie Chen	Multimedia Database (Papers published: 8)	PhD
Texas State	2004	Huibo Ma	Specification-based Firewall Testing (Papers published: 2)	Master
Texas State	2003	Yutu Liu	QoS Computation and Policing in Dynamic Web Service Selection. Student gained admission to Texas A&M PhD Program (Papers published: 2)	Master
UNSW (Co-supervisor)	2003	LiangZhao Zeng	Dynamic Web Service Composition (Papers published: 7)	PhD

UNSW	1998	Mohammad Nabil	Modelling and Retrieving Multimedia Data Using Spatial and Temporal Information (Papers published: 7)	PhD
UNSW (Co-Supervisor)	1998	Banchong Harangsri	Query Size Estimation in Databases (Papers Published: 9)	PhD
UNSW	1997	Uma Srinivasan	A Framework for Conceptual Integration of Heterogeneous Databases (Papers published: 7)	PhD
UNSW	1997	Rong Lei	Dimension Reduction in Multimedia Data for Efficient Indexing (Papers published: 3)	Master
UNSW	1993	Kang Hyuk Lee	Experimentation on Maximal Subqueries for Heterogeneous Query Optimization	Master
UNSW	1993	Banchong Harangsri	Data Allocation on Distributed Database Systems (Papers published: 1)	Master

D. Courses Prepared and Curriculum Development:

- At **Texas State**: CS5369G, CS5376, CS5332, CS4332, CS4354
- At **Texas State**: Course coordinator for CS4332
- At UNSW: COMP3311 (Database Systems), COMP9804 (Distance learning version of Database Systems), COMP9314 (Next-generation databases), COMP9315 (Database Systems and Implementation)
- Supervised the development of the distance education Certificate Program in Computer Science.

E. Funded External Teaching Grants and Contracts:

1. Co-Principal Investigator, Australian National Teaching Development Grant (CAUT) valued at $36,450 for student-centered assessment system, 1993 at UNSW.
2. Co-Principal Investigator, "SPARK: Increasing the Recruitment and Retention of Female Undergraduates in Engineering and Computer Science, Funded by **NSF-STEM** valued at $599,982, 2012
3. Co-Principal Investigator, " C2—Critical contributors: Women in the engineering and technology workforce", submitted to **NSF-S-STEM**, valued at $999706. This proposal is still pending.

G. Funded Internal Teaching Grants and Contracts:

1. Principal Investigator, *Enterprise System Laboratory* valued at $4800 from Academic Computing, Texas State, 2009.

2. Principal Investigator, *Adapt Web-based Collaboration Software for Collaborative Problem Solving in Undergraduate and Graduate, a. teaching technology workshop grant* valued at $1200 from Instructional Technology, Texas State, 2007.

3. Co-Principal Investigator, *University Capital Grant* valued at $308,000 for setting up research and teaching infrastructure for databases in 1996 at UNSW.

4. Principal Investigator, *University Development Grant* valued at $80,000 for developing a post-graduate certificate course in Computer Science Distance Education in 1996 at UNSW.

I. Other:

1. Faculty Teaching Development Activities

- Completed Graduate Certificate in Higher Education
- Completed Oracle Administration course
- Completed Object-Oriented Database Design course using ObjectStore

2. Distance Learning Teaching Initiative

I led the distance education Graduate Certificate in Computer Science project at UNSW from 1995-2000. This involved development of four Computer Science subjects:

- Computer Programming and Design
- Data Structures and Algorithms
- Computer Organization and Architecture
- Database Design and Analysis

I was the main author for Database Design and Analysis subject and also the project manager for the project. This included keeping other authors on schedule, making arrangements for casual helpers, ordering the necessary hardware and software, drawing up the financial plan, supervising the writing of the laboratory manual for the desktop programming environment, as well as developing a marketing plan for this certificate program.

3. Undergraduate Theses Supervised:

- At Texas State: Supervisor, 2 undergraduate independent study projects
- At Texas State: Supervisor, 23 REU undergraduates to date
- At UNSW: Supervisor, 16 undergraduate theses; member, 23 undergraduate theses

List of Undergraduate thesis supervised

Institution	Year	Name	Thesis Topic
TxState	2012	Joseph Molin	Near Me Android Application

TxState	2008	Jared Dillard	Collaborative Ranking of Products and Services
UNSW	2000	John Cleary	Information Brokerage over Dynamic Heterogeneous Sources
UNSW	2000	Eddie Yin Ho Chan	Building E-commerce Applications (group project)
UNSW	2000	James Chan-Sing Ho	Building E-commerce Applications (group project)
UNSW	2000	Alexander Kar	Building E-commerce Applications (group project)
UNSW	2000	Andrew Liu	Online Real Estate Database Management
UNSW	2000	Kim Yang	Integrated Workflows
UNSW	1999	Gunawan Liem	Query Optimizer in Venus Database
UNSW	1999	Welly Santosa	Indexing and Retrieving in Multimedia Databases
UNSW	1999	Udin Masli	Information Agents
UNSW	1999	Murali Choudary Jetti	Workflow Design Tool
UNSW	1998	Miladin Milic	Image Management System using Illustra
UNSW	1995	Hendy Hieswanto	A Market-based Distributed Query Optimizer
UNSW	1995	Eddy Siauwidjaja	Translation Tools for O2 to Ingres
UNSW	1993	Yun Tao Sun	Query Processing in Heterogeneous Database Systems
UNSW	1993	Norman Lee	A Hypertext Approach to Querying Clinical Multidatabases (Paper published: 1)

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books (if not refereed, please indicate)

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

1. Ngu AHH., Masaru Kitsuregawa, Erich Neuhold, Special issue on Web Information Systems Engineering, Journal of World Wide Web: Internet and Information Systems, Vol. 10, No. 2, June, 2007.

2. Ngu AHH., Kitsuregawa M., Neuhold E., Chung Jen-Yao, Sheng QZ., Web Information Systems Engineering (WISE05) Proceedings, New York City, New York, LNCS 3806, ISBN 3-540-30017-1, Springer, November 2005.

3. Rakesh Agrawal, Klaus Dittrich and Ngu AHH., Proceedings of the Eighteenth International Conference on Data Engineering (ICDE2002), San Jose, California, February 26 - March 1st, 2002, IEEE Computer Society Publisher

d. Chapters in Books:

1. Ngu AHH., Liu Y., Zeng LZ., and Sheng QZ., Configurable QoS Computation and Policing in Dynamic Web Service Selection, Service Oriented Computing (SOC), Georgakopoulos D. & Papazoglou M. (eds), MIT Press, ISBN-13:978-0-262-07296-0, 2008

2. Shen J., Shepherd J., Ngu AHH., "A Novel Signature Technique for Efficient Retrieval over Large Music Datasets", in Semantic Multimedia Retrieval, Androutsos D. (editor), CRC Press, 2006.

3. Ngu AHH., Shen J., Shepherd J., Towards Semantically Meaningful Feature Spaces for Effective Indexing in Large Image Databases, Managing Multimedia Semantics, Srinivasan U., & Nepal S. (eds), IRM Press, ISBN 159140542-4, January, 2005.

4. Srinivasan U., Ngu AHH. and Gedeon T., Concept Clustering for Cooperation in Heterogeneous Information Systems, in Database Application Semantics, Meersman R., & Mark L. (eds), Chapman & Hall, London, pp481-499, 1996.

e. Creative Books

2. Articles

a. Refereed Journal Articles:

1. Noor T. H., Sheng, Q., Yao, L., Dustdar, S., Ngu AHH., "CloudArmor: Supporting Reputation-based Trust Management for cloud Services", to appear in IEEE Transactions on Parallel and Distributed Systems (TPDS), 2015

2. Yao L, Sheng, Q., Ngu AHH, Li. X., " Things of Interest Recommendation by Leveraging Heterogeneous Relations in Internet of Things", to appear in ACM Transactions on Internet Technology (TOIT), 2015.

3. Yao L, Sheng, Q., Ngu AHH, Gao, B., Li. X., Wang S., " Multi-Label Classification via Learning a Unified Object-Label Graph with Sparse Representation, to appear in World Wide Web Journal (WWWJ), 2015

4. Yao L, Sheng, Q., Ngu AHH, Yu, J. Unified Collaborative and Content-Based Web Services Recommendation, IEEE Transactions on Services Computing, 8(3):453-466, 2015

5. Noor T.H.., Sheng Q., Ngu AHH, Dustdar S., Analysis of Web-Scale Cloud Services, *IEEE Internet Computing*, Vol. 18, No. 4, 2014.

6. Ngu AHH., Jamnagarwala A., Chin G., Sivaramakrishnan G., Critchlow T., Kepler Scientific Workflow Design and Execution with Contexts, *International Journal on Computers and their Applications, Vol. 18, No. 3, special issue on scientific workflow*s, Provenance and Their Applications, September, 2011.

7. Ngu AHH., Carlson M.P., Sheng Q.Z., Paik H., "Semantic-based Mashup of Composite Applications", *IEEE Transactions on Services Computing*, *Vol. 3, No. 1*, pages 2-15, 2010.

8. Ngu AHH., Jamnagarwala A., Chin G., Sivaramakrishnan G., Critchlow T., Context-Aware Scientific Workflow Systems, *Journal of Business Process Management and Integration,Vol. 5, No. 1, special issue on scientific workflow*s , 2010.

9. Sheng Q.Z, Benatallah B, Maamar Z, Ngu AHH., Configurable Composition and Adaptive Provisioning of Web Services, *IEEE Transactions on Services Computing, Vol.2, No. 1,* pages 34-49, January-March, 2009**.**

10. Zeng LZ., Ngu AHH., Benatallah B., Podorozhny R., Lei H., Dynamic Composition and Optimization of Web Services, *Journal on Distributed and Parallel Databases (Springer-Verlag), Vol.24, No. 1-3,* December, 2008.

11. Shen J., Shepherd J., Ngu AHH., An Empirical Study of Query Effectiveness Improvement via Multiple Visual Feature Integration, *International Journal on Image and Graphics (IJIG),Vol 7(3)*, World Scientific Publishing Company, 2007.

12. Shen J., J. Shepherd, Ngu AHH., Efficient Content based Retrieval with Multiple Acoustic Feature Composition, *IEEE Transactions on Multimedia, Vol. 8, No. 6*, December, 2006.

13. Ngu AHH., Rocco. D, Critchlow T., Buttler D., Automatic Discovery and Inferencing of Complex Bioinformatics Web Interfaces, *Journal of World Wide Web: Internet and Information Systems, Vol. 8, No. 4*, December 2005.

14. Zeng LZ.,Benatallah B., Ngu AHH., Dumas M., Kalagnanam J., Cheng J., QoS-Aware Middleware for Web Services Composition, *IEEE Transactions on Software Engineering, Vol.30, No. 5*, 2004, 694 citations on Google Scholar.

15. Ngu AHH., Harangsri B., Shepherd J., Query Size Estimation for Joins using Systematic Sampling, *Journal of Distributed and Parallel Databases, Vol. 15, No. 3*, 2004,

16. Medjahed B., Benatallah B., Bouguettaya A., Ngu AHH., Elmagarmid A., Business-to-Business Interactions: Issues and Enabling Technologies, *The VLDB Journal, Vol. 12, No. 1*, May 2003. 233 citations on Google Scholar.

17. Zeng LZ., Benatallah B., Lei H., Ngu AHH., Flaxer D., Chang H., Flexible Composition of Enterprise Web Services, *International Journal of Electronic Commerce and Business Media, Vol. 13, No. 2*, 2003. 54 citations on Google Scholar.

18. Nodine M., Ngu AHH., Cassandra T., Bohrer W., Scalable Semantic Brokering over Dynamic Heterogeneous Data Sources in InfoSleuth, *IEEE Transactions on Knowledge and Data Engineering, Vol. 15, No. 5*, September-October 2003. 111 citations on Google Scholar.

19. Ngu AHH., Sheng QZ., Huynh D., Lei R., Combining Multi-visual Features for Efficient Indexing in a Large Image Database, *The VLDB Journal, Vol. 9, No. 4*, pp279-293, January, 2001.

20. Nabil M., Ngu AHH., Shepherd J., Modeling and Retrieval of Moving Objects, *International Journal on Multimedia Tools and Applications, Vol. 13, No. 1*, pp35-71, January, 2001.

21. Srinivasan U., Ngu AHH., Gedeon T., Managing Heterogeneous Information Systems through Discovery and Retrieval of generic concepts, *Journal of American Society of Information Science*, Vol. 51, No. 8, John Wiley & Sons, May, 2000.

22. Weigand H., Ngu AHH, Flexible Specification of Interoperable Transactions, *International Journal on Data and Knowledge Engineering, North-Holland*, Vol. 25, No. 3, 1998.

23. Nabil M., Ngu AHH and Shepherd J., Picture Similarity Retrieval using 2D Projection Interval Relationships, *IEEE Transactions on Knowledge and Data Engineering* , Vol. 8, No 4, August, 1996. 97 citations on Google Scholar.

24. Ngu AHH, Meersman R, Weigand H., Specification and Verification of Communication Constraints for Interoperable Transaction, *International Journal of Intelligent and Cooperative Information Systems*, Vol. 3, No. 1, pp47-65, 1994.

25. Ngu AHH., Specification and Verification of Temporal Relationships in Transaction Modeling, *Information System*, Vol. 15, No. 2, pp257-267, 1990.

26. Ngu AHH.,Conceptual Transaction Modeling, *IEEE Transactions on Knowledge and Data Engineering*, Vol. 1, No 4, pp508-518, 1989 (selected as the best student paper in ICDE89).

b. Non-refereed Articles:

3. Conference Proceedings

a. Refereed Conference Proceedings/Workshops:

1. Gutierrez M, Fast M. Fast, Ngu AHH., Gao B., “Real-Time Prediction of Blood Alcohol Content Using Smartwatch Sensor Data”, International Conference for Smart Health (ICSH 2015), November, Phonexi, Arizona, 2015

2. Yao L, Sheng Q.Z, Ngu AHH., ThingsNavi: Finding Most Related Things Via Multi-Dimensional Modeling Human-Things Interactions, 11th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (Mobiquitous 2014), London, Great Britain, 2014.

3. Yao L, Sheng Q.Z, Ngu AHH., Gao B. Keeping You in the Loop: Enabling Web-based Things Management in the Internet of Things, ACM Conference on Information and Knowledge Management (CIKM 2014 Demo Paper), Shanghai, China.

4. Ngu AHH, Julian S., Ma J., Sheng Q.Z., Yao L. ServiceXplorer: A Similarity-based Web Service Search Engine, ACM Conference on Information Retrieval (SIGIR 2014 demo track), July-6-11, 2014, Gold Coast, Australia.

5. Ngu AHH., Memmi H., Torres J., Park H., Hajimirsadeghi S., Shepherd J. "Social-PPM: Social-Aware Personal Process Management", The Second Asia-Pacific Conference on Business Process Management (APBM 2014), Brisbane, Australia.

6. Boman J., Taylor J., Ngu AHH, Flexible Middleware for Integration of Things and Applications, 2nd International Workshop on Internet of Things (C-IOT 2014), October 22, Miami, USA, 2014.

7. Yao L., Sheng Q.Z., Gao B, Ngu AHH, A Model for Discovering Correlations of Ubiquitous Things, IEEE International Conference on data Mining, Dallas, December, 2013.

8. Noor T.H., , Sheng Q.z., Ngu AHH, Cloud Armor: A Platform for Credibility-Based Trust Management of Cloud Services, ACM Conference on Information and Knowledge Management (CIKM 2013), CA, USA, 2013

9. Noor T.H., , Sheng Q.z., Alfazi A., Law J., Ngu AHH, CSCE: A Crawler Engine for Cloud Services Discovery on the World Wide Web, IEEE International Conference on Web Services (ICWS 2013), June, 2013, Sanata Clara, USA, 2013.

10. Ma J. , Sheng Q.Z., Liao K., Zhang Y., Ngu AHH., WS-Finder: A Framework for Similarity Search of Web Services, tenth International Conference on Service Oriented Computing, November, Shanghai, China, 2012.

11. Hicks C, Scheffer M., Ngu AHH., Sheng Q.Z., Discovery and Cataloging of Deep Web Sources, IEEE International Workshop on Data Integration and Mining (DIM-2012), Las, Vegas, USA, July, 2012.

12. Chin G., Sivaramakrishnan G., Critchlow T., Schuchardt K., Ngu AHH., Scientist-Centered Workflow Abstractions via Generic Actors, Workflow Templates and Context-Awareness for Groundwater Modelling and Analysis, IEEE 2011 Fifth International Workshop on Scientific Workflows, Washington D.C., USA, July, 2011.

13. Hoang D.T., Paik HY., Ngu AHH., Spreadsheet as a Generic Purpose Mashup Development Environment, *International Conference on Service Oriented Computing (ICSOC10),* San Francisco, USA, December, 2010. Acceptance rate: 15%

14. Yildiz U., Guabtni A., Ngu AHH., Towards Scientific Workflow Patterns, to appear in *The Fourth Workshop on Workflows in Support of Large-Scale Science (in conjunction with SC 2009)*, Portland, OR, November 16, 2009. Acceptance rate: 60%

15. Yildiz U., Guabtni A., Ngu AHH., Business verses scientific workflows: A comparative study,

IEEE 2009 Third International Workshop on Scientific Workflows (SWF 2009), Los Angeles, California, USA, July 6-10, 2009. Acceptance rate: 60%

16. Sheng QZ., Pohlenz S., Yu J., Wong HS., Ngu AHH., Maamar Z., ContextServ: A Platform for Rapid and Flexible Development of Context-Aware Web Services. *31st International Conference on Software Engineering (ICSE 2009),* Vancouver, Canada, May 16-24, 2009. Acceptance rate: 33%

17. Sheng QZ., Maamar Z.,Yu J, Ngu AHH., Robust Web Services Provisioning Through On-Demand Replication, *The 8th International Conference on Information Systems Technology and Its Applications (ISTA 2009)*. Sydney, Australia, April 21-24, 2009. Acceptance rate:33%

18. Carlson M.P., Ngu AHH., Podorozhny R., Zeng L.Z., Automatic Mash Up of Composite Applications, *International Conference on Service Oriented Computing (ICSOC08),* Sydney, Australia, December, 2008. Acceptance rate: 20%

19. Ngu AHH, Bowers S., Haasch N., McPhilips T., Critchlow T., Flexible Scientific Workflow Modeling using Frames, Templates and Dynamic Embedding, 20th International Conference on Scientific and Statistical Database Management (SSDBMS08) , July 9-11, Hong Kong, China, 2008. Acceptance rate: 50%

20. Sheng QZ., Ngu AHH., A Novel Approach for Robust Web Services Provisioning, *The 9th International Conference on Enterprise Information Systems (ICEIS07)*, June 12-16, Funchal, Madeira, Portugal, 2007. Acceptance rate:40%

21. Bowers S., Ludaescher B., Ngu AHH. Critchlow T., Enabling Scientific Workflow Reuse through Structured Composition of Dataflow and Control-Flow, *IEEE Workshop on Workflow and Data Flow for Scientific Applications (SciFlow2006)*, April, Atlanta, 2006. 29 citations on Google Scholar.

22. Shen J., Shepherd J., Ngu AHH., InMAF: Indexing music databases via multiple acoustic features, *ACM SIGMOD Conference*, 2006. Acceptance rate: 20%

23. Podorozhny R., Ngu AHH., Georgakopoulos D., Business Process Learning for Real Time Enterprise, *First International Workshop on Business Intelligence for Real Time Enterprise (BIRTE)*, September 11, 2006, Seoul, Korea.

24. Zhao Z., Sheng Q.Z., Ngu AHH., On-Demand Invocation of web Services, *The IASTED Conference on Web Technologies, applications, and Services*, Calgary, Alberta, Canada, July 17-19, 2006.

25. Ngu AHH. Buttler D., Critchlow T., Automatic Generation of Service Class Description for Automatic Classification of Web Sources, *2nd International Workshop on Data Integration in the Life Sciences (DILS 2005)*, July, San Diego, 2005. Accepted as a short paper. Acceptance rate: 50%

26. Shen J., Shepherd J., Ngu AHH., On Efficient Genre Music Classification, *10th International Conference on Database Systems for Advanced Applications (DASFAA2005)*, April, Beijing, China, 2005. Acceptance rate: 22%

27. Shen J., Shepherd J., Ngu AHH., Semantic-Sensitive Classification for Large Image Libraries, *The Eleventh International Multi-Media Modeling Conference (MMM2005)*, Melbourne, Australia, January 2005. Acceptance rate: 47%

28. Liu. A., Gouda G.M., Ma. H., Ngu AHH., Non-Intrusive Testing of Firewalls, *1st International Computer Engineering Conference: New Technologies for the Information Society (ICENCO'2004)*, Cairo, Egypt, 2004. Given as invited talk at ICENCO 2004 by Gouda.

29. Liu. A., Gouda G.M., Ma. H., Ngu AHH., Firewall Queries, *8th International Conference on Principles of Distributed Systems (OPODIS-04)*, Grenoble, France, 2004. Acceptance rate: 29%

30. Shen J., Ngu AHH., Shepherd J., Integrating Heterogeneous Features for Efficient Content Based Music Retrieval, to appear in *13th Conference on Information and Knowledge Management-CIKM2004*, Washington DC, November 8-13, 2004. Acceptance rate: 29%

31. Sheng QZ., Benatallah B., Maamar Z., Dumas M., Ngu AHH., Enabling Personalized Composition and Adaptive Provisioning of Web Services, *16th International Conference on Advanced Information Systems Engineering - CAiSE2004*, Latvia, June 7-11, 2004. Acceptance rate:24%

32. Liu Y., Ngu AHH., Zeng LZ., QoS Computation and Policing in Dynamic Web Service Selection, *13th International Conference on World Wide Web (alternate track)*, New York City, May 2004. Acceptance rate: 29%. 310 citations on Google Scholar.

33. Shen J., Shepherd J., Ngu AHH., Huynh D., Improving Query Effectiveness for Large Image Databases with Multiple Visual Feature Combination, *9th International Conference on Database Systems for Advanced Applications (DASFAA2004)*, March17-19, Korea, 2004. Acceptance rate: 22%

34. Shen J., Ngu AHH., Shepherd J., Huynh D., Sheng QZ., CMVF: A Novel Dimension Reduction Scheme for Efficient Indexing in A Large Image Database (a demo paper), *ACM Special Interest Group on Data Management, SIGMOD2003*, June, San Diego, 2003. Acceptance rate: 30%

35. Benatallah B., Dumas M., Sheng QZ., Ngu AHH., Declarative Composition and Peer-to-Peer Provisioning of Dynamic Web Services, *18th International Conference on Data Engineering (ICDE2002)*, February, 2002. Acceptance rate: 18%. 318 citations on Google Scholar.

36. Ngu AHH., Georgakopoulos D., Baker D., Cichocki A., Advanced Process-based Component Integration in Telcordia's Cable OSS, (a demo paper) *18th International Conference on Data Engineering (ICDE2002)*, February 2002. Acceptance rate: 30%

37. Zeng LZ., Benatallah B., Ngu AHH., AgFlow: Agent-based Cross-Enterprise Workflow Management System (a demo paper), *27th International Conference on Very Large Databases, VLDB2001*, Rome, Italy, September 11-14, 2001. Acceptance rate: 30%

38. Zeng LZ., Ngu AHH., Benatallah B., On Demand Business-to-Business Integration, *Ninth International Conference on Cooperative Information System (CoopIS)*, Trento, Italy, September 5-7, 2001. Acceptance rate: 25%

39. Zeng LZ., Ngu AHH., Benatallah B., Agent-based Service Discovery for Workflow Integration, *Proceedings of the International Symposium on Information Systems and Engineering, ISE 2001*, Las Vegas, Nevada, June 25-28, 2001. Acceptance rate: 62%

40. Zeng LZ., Ngu AHH., Benatallah B., O'Dell M., An Agent-based approach for supporting Cross-Enterprise Workflows, *Proceedings of the Twelfth Australasian Database Conference (ADC2001)*, Bond University, Queensland, Australia, February 2001. Acceptance rate: 50%

41. Nodine M, Bohrer W., Ngu AHH., Semantic Brokering over Dynamic Heterogeneous Data Sources in InfoSleuth. *15th International Conference on Data Engineering (ICDE99)*, Sydney, Australia, March 23-26, 1999. Acceptance rate: 19%

42. Ngu AHH., Specification of Cooperative Constraints in Virtual Enterprise Workflow *Ninth International Workshop on Research Issues in Data Engineering: Virtual Enterprise, RIDEVE' 99*, Sydney, Australia, March, 1999. Acceptance rate: 47%

43. Nabil N., Ngu AHH., Shepherd J., An Image Retrieval System for Distributed Environments *Eighth International Workshop on Research Issues in Data Engineering: Continuous-Media Databases and Applications, RIDE'98*, Orlando, Florida, February, 1998. Acceptance rate: 50%

44. Harangsri B., Shepherd J., Ngu AHH., Selectivity Estimation for Joins Using Systematic Sampling, *8th International Conference and Workshop on Database and Expert Systems Applications (DEXA97)*, IEEE Computer Society Press, Toulouse, France, September 1-5, 1997. Acceptance rate: 50%

45. Lei R., Ngu AHH., Indexing Multi-Visual Feature in Image Database, *Fifteenth British National Conference on Databases, BNCOD15*, Birkbeck College (poster paper), University of London, July, 1997. Acceptance rate: 30%

46. Harangsri B., Matsushima S., Shepherd J., Ngu AHH., Handling Missing Values in Database Systems using a Naive Bayesian Classifier (a poster paper), *ACM SIGMOD Workshop on Research Issues in Data Mining and Knowledge Discovery*, Tucson, Arizona, May 11, 1997. Acceptance rate: 30%

47. Lei R., Ngu AHH., Jin J., Reducing Dimensions of Multiple Visual Features for Indexing in Multimedia Databases, *The Second International Conference on Multimedia Information System, ICMIS 97*, Schaumburg, Illinois, pp42-49, April, 1997. Acceptance rate: 50%

48. Nabil N., Ngu AHH., Shepherd J., Modeling Moving Objects in Multimedia Databases *Fifth International Conference on database Systems for Advanced Application, DASFAA'97*, Melbourne Australia, April, 1997. Acceptance rate: 30%

49. Harangsri B., Shepherd J., Ngu AHH., Query Size Estimation Using Machine Learning (II) *Proceeding of the Fifth International Conference on Database Systems for Advanced Applications (DASFAA'97)*, Melbourne, Australia April, 1997. Acceptance rate: 30%

50. Harangsri B., Shepherd J., and Ngu AHH., Query Size Estimation using Systematic Sampling, *International Symposium on Cooperative Database Systems for Advanced Applications*, Heian Shrine, Kyoto, December 1996. Acceptance rate: 50%

51. Harangsri B., Shepherd J., and Ngu AHH., Query Size Estimation using Machine Learning (I), *Proceedings of the International Conference on Artificial Intelligence (TAAI-96)*, National Sun Yat-Sen University, Kaohsiung, Taiwan, R.O.C., December 1996. Acceptance rate: 50%

52. Ngu AHH, Duong T. and Srinivasan U., Workflow Modeling using Tasks and Transactions (extended version) *7th International Conference and Workshop on Database and Expert Systems Applications*, Zurich, Switzerland, September, 1996. Acceptance rate: 50%

53. Ngu AHH, Duong T. and Srinivasan U., Workflow Modeling using Tasks and Transactions *Proceedings of the NSF Workshop on Workflow and Process Automation in Information Systems*, Atlanta, USA, May 1996. Acceptance rate: 30%

54. Harangsri B., Shepherd J., and Ngu AHH., Query Optimization in Multidatabase Systems using Query Classification, *11th Annual Symposium on Applied Computing (SAC' 96)*, Philadelphia, Pennsylvania, February 1996. Acceptance rate: 30%

55. Harangsri B., Shepherd J., and Ngu AHH., Query Classification in Multidatabase Systems, *Seventh Australasian Database Conference Proceedings*, Melbourne Australia, January 1996. Acceptance rate: 40%

56. Shepherd J., Harangsri B., Chen HL and Ngu AHH., A Two-Phase Approach to Data Allocation in Distributed Databases, *4th International Conference on Database Systems for Advanced Applications, DASFAA'95*, Singapore, April, 1995. Acceptance rate: 30%

57. Nabil M., Shepherd J., and Ngu AHH, 2D Projection Interval Relationships: A Symbolic Representation of Spatial Relationships, *Fourth International Symposium on Large Spatial Databases*, SSD'95, Boston, August, 1995. Acceptance rate: 30%

58. Gedeon TD., Koczy LT., Ngu AHH., Bustos RA., and Shepherd JA, Learning Fuzzy Measure Functions for Information Retrieval, *Proceedings of the International Joint Conference of the 4th IEEE International Conference on Fuzzy Systems and the 2nd International Fuzzy Engineering Symposium (FUZZ-IEEE/IFES'95)*, Yokohama, 1995.

59. Srinivasan U., Ngu AHH., Information Re-engineering for Cooperative Clinical Information Systems, *2nd International Conference on Application of Databases*, Ed: M. Borges, M. Ketabchi and R. Krishnamurthy, Santa Clara, pp107-119, December, 1995. Acceptance rate: 30%

60. Ngu AHH., Meersman R., Weigand H., Specification and Verification of Communication Constraints for Interoperable Transaction, *2nd International Conference on Cooperative Information Systems*, Toronto, 1994 (One of the top five best papers). Acceptance rate: 25%.

61. Ngu AHH, Gedeon T and Shepherd J., Discovering Indexing Parameters for Information Filtering, *Second Singapore International Conference on Intelligent Systems*, Singapore, November 1994. Acceptance rate: 50%

62. Nabil M., Ngu AHH., Shepherd J., Modeling of Spatio-temporal Relationships in Multimedia Databases, *IEEE workshop on Spatial and Temporal Interaction: Representation and Reasoning*, Singapore, November 1994. Acceptance rate: 50%

63. Nabil M., Ngu AHH., Shepherd J., A Unified Representation of Spatial and Temporal Information in Multimedia Database, *Third International Conference on Automation, Robotics and Computer Vision*, Singapore, November, 1994. Acceptance rate: 50%

64. Srinivasan U., Ngu AHH. and Gedeon T., Discovery of Generic Concepts from Heterogeneous Clinical Information Systems, *Second International Conference on Intelligent Systems*, Singapore, November 1994. Acceptance rate: 50%

65. Lee N., Ngu AHH., Srinivasan U., A Hypertext Approach to Querying Clinical Multidatabases, *5th International Hong Kong Computer Society Database Workshop*, Hong Kong, February, 1994. Acceptance rate: 30%

66. Ngu AHH., Yan LL., Wong LS., Heterogeneous Query Optimization using Maximal Subqueries, *The Third International Symposium on Database Systems for Advanced Applications*, Daejon, Korea, 1993. Acceptance rate: 30%

67. Ngu AHH., Wong LS., PINOL: Persistent Object Oriented Database Programming Language, *The Third International Symposium on Database Systems for Advanced Applications*, Daejon, Korea, 1993. Acceptance rate: 30%

68. Duong T., Hiller J., Ngu AHH., Contracting Mechanism: Dynamic and Flexible Way to Integrate Information, *1st International Conference on Intelligent and Cooperative Information Systems*, May 12-14, Rotterdam, Netherlands, 1993.

69. Dijkstra JM., Ngu AHH., Ariadne: A Standard Compliant and Integrated Electronic Document Delivery System, *17th International Online Information Meeting*, London, England, December, 1993. Acceptance rate: 25%

70. Harangsri B., Ngu AHH., A New Heuristic for Data Allocation. *Proceedings of the International Symposium on Next Generation Database Systems and Their Applications*, Japan, September, 1993. Acceptance rate: 25%

71. Ngu AHH., Shepherd J., How to deal with 10,000 news items per day: an Intelligent Assistant for Newsreading, *Proceedings of the Inaugural Australian and New Zealand Conference on Intelligent Information Systems*, Perth, Australia, December, 1993. Acceptance rate: 50%

72. Gedeon T., Ngu AHH., Index Generation is Better than Extraction, *Proceedings of the International Conference on Non-linear Theory*, Hawaii, 1993.

73. Duong T., Hiller J., Ngu AHH., Information Integration through Contract, *The Third International Symposium on Database Systems for Advanced Applications*, Daejon, Korea, April, 1993. Acceptance rate: 30%

74. Ngu AHH., Wong LS., and Widjojo S., On Canonical and Non-Canonical Classifications, *The 2nd International Conference on Deductive and Object-Oriented Databases, DOOD91*, Lecture Notes in Computer Science, Springer-Verlag, Munich, Germany, 1991. Acceptance rate: 25%

75. Ngu AHH., Transaction Modeling, *5th International Conference on Data Engineering, ICDE89*, Los Angeles, 1989. Best Student Paper award. Acceptance rate: 20%

76. Ngu AHH., Data Modelling through Quasi-natural Language, *Proceedings of the 10th Australian Computer Science Conference*, Victoria, Australia, page:57-67, 1987. Acceptance rate: 40%

77. Ngu AHH., Morris J., An Experiment in Program Generation, *Proceedings of the 6th Australian Computer Science Conference*, Sydney, Australia, 1983. Acceptance rate: 40%

b. Non-refereed:

1. Ngu AHH., Role of Multibrokers in Electronic Commerce, *Second International Workshop on Technological Challenges of Electronic Commerce*, Beijing, China, May 17-23, 1999. Given as invited talk.

2. Ngu AHH., Shepherd J., and Yamamoto T., A Fuzzy Model for Information Retrieval, *3rd International Conference on Fuzzy Logic, Neural Nets and Soft Computing*, August, 1994.

3. Gedeon T., Hiller J., Ngu AHH., Storage and Visualization of Medical Images - From Scanner to Database to Display, *Australia and New Zealand Association for the Advancement of Science Science Congress*, Perth, 1993.

4. Abstracts:

1. Chow, T.E., Ngu AHH., Lin Y., Phillips C., Thornhill S. “Record Linkage of Web Demographics as a GeoComputation Challenge”, In the Workshop on Volunteered

Geographic Information in Advancing Science: Quality and Credibility, GIScience 2012 September, 2012.

2. Ngu AHH., Chin G., Critchlow T., "Context-Aware Actors", Ninth Biennial Ptolemy Mini-conference, Berkeley, February 16th, 2011.

3. Ngu AHH., West S., Kepler-Discovery: An open source cyber-learning resource for AP Environmental Science, Texas Academy of Science, Junction, Texas, March, 2009.

4. Ngu AHH., Haasch N., Critchlow T., Bowers S., McPhilips T., Ludaescher B., Flexible Scientific Workflow through Dynamic Embedding, Ptolemy II Mini Conference 2007, Berkeley, February, 2007.

5. Ngu AHH., Shepherd J., and Magin D., Engineering Peers: Computer-Assisted Approach to the development of Peer Assessment System, *Research and Development in Higher Education 18: Blending Tradition and technologies, HERDSA 95*, Rockhampton, Queensland, 1995.

6. Andresen L., Ngu AHH., et al. Testing the Limits of Autonomy: The Participant-led Workshop, *Research and Development in Higher Education 17: Higher Education in Transition, HERDSA 94*, Canberra, 1994.

5. Reports:

1. Ngu AHH., Gu Q., Peng Q., Roberts M., ActionItem: Collaboration through Commitment and Social Tasking, Department of Computer Science, Texas State Report Number (TXSTATE-CS-TR-2009-11)

2. Ngu AHH., Haasch N., Critchlow T., Bowers S., McPhilips T., Ludaescher B., Flexible Scientific Workflows Using Frames and Dynamic Embedding, *Department of Computer Science, Texas State Report Number (TXSTATE-CS-TR-2007-7)*, April 2007. 202 download to date.

3. Ngu AHH., Rocco D., Critchlow T., Buttler D., Automatic Discovery and Inferencing of Complex Bioinformatics Web Interfaces, *Lawrence Livermore National Laboratory Technical Report (UCRL-JRNL-201611)*, December, 2003.

4. Ngu AHH., Ooi BC. & Wong LS., Types and Classes as Distinct Modelling Concepts in an Object Oriented Data Model, *Institute of Systems Science, National University of Singapore*, TR90-49-0, pages:31, 1990.

5. Lim JJ., Ngu AHH. & Ooi BC., Visual Programmatic Interface to Object, *Institute of Systems Science, National University of Singapore*, TR90-36-0, pages:24, 1990.

6. Ngu AHH., An Integrated Data and Transactions Modelling Environment, *Department of Computer Science, University of Western Australia*, TR89-1, pages:21, 1989.

6. Book Reviews:

1. Mike P. Papazoglou, Web Services: Principles and Technology, *Pearson, Prentice Hall*, 2006

7. Other (papers under preparation):

1. Xu Jing, Hye-Young Park, Ngu AHH, "Personal Process Description Graph for Describing and Querying Personal Processes"
2. Ngu AHH, Shawn Fang and Helen Paik, 'Social-PPM: Personal Experiences Sharing and Recommendation

B. Works not in Print

1. Papers Presented at Professional Meetings (since 2010):

- Ngu, AHH., Cloud Armor: A Platform for Credibility-Based Trust Management of Cloud Services, ACM Conference on Information and Knowledge Management (CIKM 2013), 2013

- Ngu, AHH, A Crawler Engine for Cloud Services Discovery on the World Wide Web, ICWS 2013

- Ngu AHH., Chin G., Critchlow T., "Context-Aware Actors", Ninth Biennial Ptolemy Mini-conference,, Berkeley, February, 2011.

- Hoang D.T., Paik HY., Ngu AHH., Spreadsheet as a Generic Purpose Mashup Development Environment, *International Conference on Service Oriented Computing (ICSOC10),* San Francisco, USA, December, 2010.

2. Invited Talks, Lectures, and Presentations (since 2010):

- Ngu, AHH, Context-Aware IoT Middleware and Applications, November, e-Health, CSIRO, Brisbane, Australia

- Ngu, AHH, Context-Aware IoT Middleware and Applications, December, RMIT, Melbourne, Australia

- Ngu AHH., REU presentation at CS Major Welcome Day, 2014

- Ngu, AHH, Faculty Speaker at SPARK Scholar Orientation Day, 2013

- Ngu, AHH, Panel member, NSF REU Site 2013 Meeting, March, 2013.

- Ngu, AHH., REU-IR Program, Computer Science Department EXE Society, 2012.

- Ngu AHH, Context-aware scientific workflow, School of Computing, National University of Singapore, January, 2011.

- Ngu AHH. Context-aware scientific workflow, Computer Science Industry Advisory Board Meeting, November, 2010.

- Ngu AHH., Context-Annotation, Pacific Northwest National Laboratory, July, 2010.

3. Consultancies:

9/1999-6/2000, Innovit Technologies Pty Ltd, Sydney, Australia

- Led the design and specification of a cross-enterprise web service composition engine based on a semantic multi-brokering approach. This helped the client to secure $244,900 in competitive government funding.

- Supervised the implementation of a semantic multibroker prototype using EJB, XML, Microsoft Access and CORBA technologies.

1/1999-6/2000, JustWin Technology Pty Ltd, Sydney, Australia

- Led the design and specification of a change management tool for Justwin's Lotus Domino-based workflow engine. This helped the client to secure $262,560 in competitive government funding.

4. Workshops:

1) Attended Impact Day – Building a Deeper Computer Science Talent Pool, September 5, 2014
2) Attended PhD Proposal Writing
3) Attended 17th Annual Central Texas Women Profiles in Power and Women of Influence Event, July 14th, 2011.
4) Won a travel grant to attend NCWIT Summit in Tucson in May 2013.
5) Won a travel grant to attend NCWIT Summit n Chicago in May 2012.
6) Won a travel grant to attend NCWIT Summit in New York City in May, 2011.
7) Attended Fullbright Program Workshop at Texas State University, 2012.
8) Attended Texas Environment Education Advisory Committee Meeting (December 10th, 2008)
9) Attended Texas Research Exchange Fest at Texas A&M (September, 2008)
10) Attended NSF Grant Workshop hosted by the College of Science (August 2006)

5. Other:

C. Grants and Contracts

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1. Funded External Grants and Contracts:

1. Principal Investigator, REU SITE: Multidisciplinary Research Experiences for Undergraduates in Internet of Things. **NSF-CISE**, total funding requested is $323,481. 2014.

2. Co-Principal Investigator, *II-NEW: Shared High Performance Data Center*, **NSF-CRI** Program. Total awarded is $375,756, 2013.

3. Principal Investigator, Pilot Implementation of System for Innovation in Personalized Health Monitoring, **GeneticEve LLC**. Total Awarded is $10,693.00, 2015

4. Principal Investigator, *REU Site: Research Experiences in New Paradigms of Information Retrieval from Diverse Data.* Submitted to **NSF-OCI** program. Total awarded is $359,827. Award # OCI-1062439. Program duration is 3/1/2011-2/28/2014.

5. Co-Principal Investigator*, II-NEW: Shared High Performance Data Center.* Submitted a to **NSF-CISE CRI** program. PI is Mark Mckenney. Total awarded is 50K. Program duration is 2/1/2011/1/1/2013.

6. Principal Investigator, *Pacific Northwest National Laboratory Contract* valued at $80,000 for research in Context-Aware Generic Actors (DE-AC05-76RL01830) from 2008-2010.

7. Collaborator, *Australian Research Council Discovery Grant* valued at $216,354 for research in developing a platform for rapid and flexible development of context-aware web services in 2007 (PI is Sheng QZ from Adelaide University, South Australia, Australia). As a collaborator, I don't get access to this fund. Dr Sheng funded my collaborative visit to Australia in July 2009 from this grant.

8. Principal Investigator, *Large Australian Research Council SPIRT Grant* valued at $244,900 (excluding contribution from the industry partner) for research in semantic multi-brokering over dynamic heterogeneous workflows in 2001.

9. Principal Investigator, *Large Australian Research Council SPIRT Grant* valued at $262,560 (excluding contribution from the industry partner) for research in managing changes in dynamic workflow environment in 2000.

10. Principal Investigator, *Small Australian Research Council Grant* valued at $15,000 for indexing and retrieval of images from very large collections in 1998.

11. Co-Principal Investigator, *Small Australian Research Council grant* valued at $30,000 for operating system support for object-oriented databases in 1997 and 1998.

12. Principal Investigator, *Small Australian Research Council grant* valued at $15,000 for research on cooperative transaction models in 1995.

13. Co-Principal Investigator, *Australian Telecommunication & Electronic Board (ATERB) Grant*, valued at $11,000 for research work in consistent indexing in 1994.

14. Co-Principal Investigator, *Small Australian Research Council Grant* valued at $13,000 on automatic indexing for intelligent document retrieval in 1994.

3. Funded Internal Grants and Contracts:

1. Principal Investigator, *Research Enhancement Program, Texas State* valued at $US 8000 for Process-based Approach to Cross-Enterprise Process Integration in 2002.

2. Principal Investigator, *Special Research Grant* valued at $8000 for Multimedia Database in 1996 at UNSW.

3. Principal Investigator, *Infrastructure Grant* valued at $35,000 for object-oriented databases research in 1994 at UNSW.

D. Fellowships, Awards, Honors:

2014 **Presidential Distinction Award for Services**, Texas State.
2013 **NCWIT Undergraduate Research Mentoring Award,** NCWIT and AT&T
2010 **Dean Nominee**, Presidential Award for Excellence in Scholarly/Creative Activities, Texas State.
2008 **Special Developmental Leave** Award ($20,000), Texas State.
2006 **College Runner Up**, Presidential Award for Excellence in Scholarly/Creative Activities, Texas State.
2004 **College Runner Up**, Presidential Award for Excellence in Scholarly/Creative Activities, Texas State.
1993 **ITK Research Fellow**, Tilburg University, The Netherlands (5% of applicants are accepted).
1989 **Best Student Paper**, IEEE International Conference on Data Engineering.
1986 **University Research Studentship**, University of Western Australia.
1982 **E.M. Russell prize** (for academic achievement), St. Catherine College, Perth, Australia.

IV. SERVICE

A. University:

2014	Panel member, Mentoring Workshop, Texas State
2009-present	Member, Library Committee, Texas State.
2006-2010	Member, Asian Studies Board of Advisors, Texas State.
2004-2005	Member, RRHEC Incentives Committee, Texas State.

B. College:

2014	Member, Dean Summative Review Group
2012-2015	Member, College Review Group
2010-2013	Member, Graduate Council, Texas State
2007-2009	Member, College of Science REP Committee, Texas State (Secured nine REP funding for CS in 2007 and 2008).
1996-1999	Member, Engineering Faculty Promotion Committee, UNSW.
1968-1999	Member, Engineering Faculty Information Technology Committee, UNSW. This committee is responsible for developing policy for Engineering Faculty (College) IT Infrastructure.
1996-1999	Member, Engineering Faculty International Committee, UNSW. This committee is responsible for developing strategies for joint marketing and development of short courses with leading universities in the Asia region.
1999	Member, School of Electrical Engineering Recruitment Committee, UNSW.
1998	Member, School of Civil Engineering Recruitment Committee, UNSW.
1996	Member, Engineering Faculty Tenure Committee, UNSW.
1996	Participant, Participated in Engineering Faculty UNIPREP program for female engineers, UNSW. Presented to the first year female engineering students about computer science career.
1996	Participant, Provided technical advice for setting up a database for Women in Research Network at UNSW.

C. Department:

2012-present	Chair, PhD Proposal Development Committee, Department of Computer Science, Texas State.
2011-2015	Chair, CS Recruitment Committee, Department of Computer Science, Texas State.
2011-2012	Chair, Policy and Procedure Committee, Department of Computer Science, Texas State.
2011-2012	Chair, Library Committee, Department of Computer Science, Texas State.
2011-present	Member, Graduate Curriculum Committee, Department of Computer Science, Texas State.
2011-present	Member, Space Committee, Department of Computer Science, Texas State.
2007-present	Member, Policy and Procedure Committee, Department of Computer Science, Texas State.
2009-2011	Chair, Graduate Curriculum Committee, Department of Computer Science, Texas State.
2006-2007	Member, Academic Honesty Committee, Computer Science Department, Texas State.
2005-present	Member, Personnel Committee, Department of Computer Science, Texas State
2005-2007	Member, Chair Search Committee, Computer Science Department, Texas State.
2004-present	Member, Recruitment Committee, Department of Computer Science, Texas State.
2004-2006	Member, PhD Proposal Committee, Department of Computer Science, Texas State. Responsible for sections on comparable PhD programs and RRHEC facilities.
2003-2008	Seminar organizer, Department of Computer Science, Texas State. Organized monthly computer science seminar. Also hosted one College of Science seminar by Dr. Moshe Vardi.
2003-present	Participated in Graduate Comprehensive Examination, Texas State. Contributed questions, assessed, and proctored exams.
2002-2009	Member, Graduate Curriculum Committee, Department of Computer Science, Texas State. Duties include approval of new graduate course and policies for graduate admission and examination.
2002-2003	Member, Department Self-Review Committee, Department of Computer Science,Texas State. Authored the section on departmental services.
2000-2000	Member, School of Computer Science and Engineering Recruitment Committee, UNSW.
1996-1998	Member, School of Computer Science and Engineering Grant Review Committee, UNSW.
1996-1998	Member, School of Computer Science and Engineering Space Committee, UNSW.
1996-1998	Member, School of Computer Science and Engineering Graduate Course Committee, UNSW.
1996	Acting Head, Department of Information Science, UNSW.
1993	Member, School of Computer Science and Engineering Undergraduate Curriculum Committee, UNSW.
1993-1994	Seminar Coordinator, School of Computer Science and Engineering UNSW.

D. Community:

1. **Served as the dissertation examiner of the following PhD candidates:**
   - Jeewani Ginige, “Change Impact Analysis to Manage Process Evolution in Web Workflows”, The University of Western Sydney, Australia, February 2008.
   - David Edmond, “Applications of Reflection for Cooperative Information Systems”, Queensland University of Technology, Australia, May 2000.

- Seyed Mohsen Sedighi, "Optimization of Query Processing in Heterogeneous Distributed Multidatabase Systems", University of Wollongong, Australia, January 1998.

- Mostafa S. Haghjoo, "Transactional Actors in Cooperative Information Systems", Australian National University, Australia, January 1995.

2. Served in the review panel for a research center:

- Appointed by the Dean of Information Technology of Queensland University of Technology to review the funding for the university Cooperative Information Systems center, November 1999.

2. Served as panel member for National Science Foundation, external reviewer for Israel Science Foundation, and external reviewer for Australian Research Council:

- NSF Panel – October, 2014
- NSF Panel – May, 2013
- NSF Panel – November, 2012
- NSF Panel – December, 2009
- Israel National Science Foundation – 2004
- Australian Research Council – 1999

4. Served as:

- a Panel member to students of Ann Richards School for Young Women Leaders during their visit to Aquarena Center-River Systems Institute at Texas State, October, 2008.
- a Science Fair judge for Harmony School of Science in Austin in 2011
- advisory member for STEM Academy at Stony Point High School, 2012.
- Chair for external PhD review Team visit in May, 2015

E. Professional:

1. Served as Chair position:

- Workshop Chair of 9th IEEE International Conference Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2013), Austin, Texas

- Program Co-Chair, International Workshop on Internet of Things (C-IOT 2013, C-IOT2014), Austin, Texas

- Key planning committee members, 3rd Women in Science and Engineering Conference at Texas State University, 2010-2011

- Co-Program Chair, WISE2005 - 6th International Conference on Web Information Systems Engineering.

- Publication Chair, ICDE2002 - 18th International Conference on Data Engineering.

- Organization Chair, ICDE1999 - 15th International Conference on Data Engineering. For this service, I was bestowed with an Outstanding Contribution Award by the IEEE Data Engineering Steering Committee.

- Session Chair, ICDE1998 - 14th International Conference on Data Engineering.

- Symposium Chair, UNSW Symposium (1997) on Next-Generation Data Management Systems.

2. Served as Program Committee Member of the following conferences:

- WISE2011, 2012, 2013 – The International Conference on Web Information Systems Engineering,
- 3rd International Workshop on Collaborative Cloud (CollabCloud 2014)
- BPSC2012 – Business Process and Service Computing, May, Luthuania.
- USECA2011– The First Workshop on User-focused Service Engineering, Sydney, Australia
- ODBASE2010– The 9th International Conference on Ontologies, Databases, and Applications of Semantics, October, Greece, 2010.
- CollaborateCom 2007 -2011- The International Conference on Collaborative Computing,
- WAIM2010, 2013- The International Conference on Web Age Information Management,
- ICEBE 2010 – The Seventh International Conference on e-Business Engineering, Shanghai, China. November 2010.
- ENASE 2009-2012. International Conference on Evaluation of Novel Approaches to Software Engineering.
- Business Process and Services Computing (BPSC 2010), September, Leipzig, Germany, 2010.
- ICEBE 2009 – The Sixth International Conference on e-Business Engineering, Macau, China, October, 2009.
- WDPP09 – First International Workshop on Data and Process Provenance, Brisbane, Australia, April, 2009.
- ICSOC08 - The Sixth International Conference on Service-Oriented Computing, Sydney, Australia.
- ICEBE 2008 – The Fifth International Conference on e-Business Engineering, Xi'an, China.
- CSSSIA2008 - The International Workshop on Context Enabled Source and Service Selection, Integration and Adaptation, Beijing, China.
- PDCAT2008 - The 9th International Conference on Parallel and Distributed Computing, Applications and Technologies, Dunedin, New Zealand.
- WAIM2008 - The 9th International Conference on Web Age Information Management, Zhangjiajie, China.
- WISE2007 - Seventh International Conference on Web Information Systems Engineering, Nancy, France.

- WISE2006 - Seventh International Conference on Web Information Systems Engineering, Wuhan, China.
- APWeb2006 - The Eight Asia-Pacific Web Conference
- ICSOC05 - The 3rd International Conference on Service-Oriented Computing.
- BPM-2005 - The 3rd International Conference on Business Process Management.
- APWeb2005 - The Seventh Asia-Pacific Web Conference.
- WEC2004 - IEEE International Workshop on Electronic Contracting.
- SCC2004 - IEEE International Conference on Services Computing.
- WSABE-2004 - International Workshop on Web Services and Agent-based Engineering.
- WISE2004 - Fifth International Conference on Web Information Systems Engineering.
- RIDE-WS-ECEG 2004 - 14th International Workshop on Research Issues on Data Engineering
- VLDB-TES2003 - International Conference on Very Large Data Bases - workshops on technologies for E-services.
- WISE2003 - Fourth International Conference on Web Information Systems Engineering.
- WSABE-2003 - International Workshop on Web Services and Agent-based Engineering.
- CIKM2001 - Tenth International Conference on Information and Knowledge Management.
- ADC (94,95,98,2000,2001) - Australasian Database Conferences.
- RIDE-VE1999 - 9th International Workshop on Research Issues in Data Engineering - VirtualEnterprise.
- EDBT-WFM1998 - International Workshop on Workflow Management.
- OOER-1995 - International Conference on Object-Oriented and Entity-Relationship Modeling.
- CoopIS (1994-1995) - International Conference on Cooperative Information Systems.
- IFIP-DS6 (1995) - International Federation of Information Processing (Data Semantics).

3. Served as Reviewer for the following Journals and Conferences:

- IEEE Journal of Biomedical and Health Informatics, 2014
- Journal of Data Mining and Digital Humanities, 2014
- Editor of special issue on Web of Things in the Journal of Information Systems Frontiers by Springer, 2014.

- IEEE Transactions on Automation Science and Engineering, 2013
- ACM Transactions on the Web
- IEEE Transactions on Services Computing, 2009, 2010, 2011, 2015
- Journal of Information Systems (Elsevier)
- Service Oriented Computing and Applications, Springer, 2009
- International Journal of Business Process Integration and Management (IJBPIM), InderScience Publishers, 2009
- International Journal of Distributed and Parallel Databases (Springer)
- Book Chapter on Context-Aware Applications, 2009
- Bioinformatics, Oxford Journals, 2008, 2010
- ACM Transactions on the Web, 2008
- IEEE Transactions on Knowledge and Data Engineering, 2008, 2010, 2013
- IEEE Transactions on Automation Science and Engineering, 2007, 2008
- International Journal of Distributed and Parallel Databases (Springer), 2008.
- International Journal of Intelligent Computing and Information Sciences (IJICIS), 2007
- ACM Transactions on Information Technology (TOIT), 2006
- Journal of Computing and Information Science in Engineering (JCISE), 2006
- ACM Transactions on Information Systems, 2005
- International Journal on Digital Libraries (Springer), 2005
- International Journal of Distributed and Parallel Databases (Kluwer Academic Publishers), 1999-2004.
- International Journal of Systems and Software (Elsevier Journal), 2004.
- International Conference on Extending Database Technology, 2004.
- Journal of World Wide Web, Internet and Web Information Systems (Kluwer Academic Publishers), 2003.
- M-services in IEEE Transactions on Systems, Man and Cybernetics Journal, 2003.
- Journal of Information Systems (Elsevier), 2003, 2010.
- International Journal of Cooperative Information Systems (World Scientific), 2003.

- IJCAI-2003 -Eighteenth International Joint Conference on Artificial Intelligence.
- International Conference on Data Engineering, ICDE 2003.
- International Conference on Very Large Databases, VLDB 2002.
- IEEE Transaction on Data and Knowledge Engineering, 1999.
- The VLDB Journal, 1997.
- ACM Transactions on Information System, ACM TOIS, 1997

F. Organizations

1. Honorary:

    a. Member of the Girl Scouts of Central Texas

2. Professional:

    a. Member of the Association for Computing Machinery
    b. Member of IEEE

G. Services Honors and Awards: