

Curriculum Vitae

Dr **Zahir Tari**

Discipline Director

RMIT University, Melbourne, Australia

1. SUMMARY

A) Personal information

Home address: 3, 9 Ellesmere Parade, Rosanna
Victoria 3084, Melbourne, Australia
Phone: +61-3-9457-3481 Mobile: +61-4-0666-0639

Work Address: RMIT University, School of Computer Science and Information
Technology, City Campus, GPO Box 2476V, Victoria 3001,
Melbourne, Australia
Phone: +61-3-9925-3782

E-mail: zahir.tari@rmit.edu.au
<http://www.cs.rmit.edu.au/~zahirt>

Fluent: English, French, Berber (Kabyle)

Citizenship: Australian, Algerian

B) Vision statement

To pursue a high impact research and development program in computer science and information systems, focusing on distributed systems, mobile computing and web services. The impact of existing and future technologies in these fields is critical for our information-based society; my personal objective is to further research and development in these fields.

C) Education

Ph.D.	1989	University of Grenoble	Computer Science	Grenoble, France
M.S.	1985	University of Grenoble	Operational Research	Grenoble, France
B.S. (Hons)	1983	University of Algiers	Mathematics	Algiers, Algeria

D) Positions held

Full Professor	2005-present	RMIT University, Australia
Associate professor	1999-2004	RMIT University, Australia
Senior lecturer	1996-1998	RMIT University, Australia
Lecturer	1993-1995	Queensland University of Technology (QUT), Australia
Postdoctoral fellow	1990-1992	Swiss Federal Institute of Technology (EPFL), Switzerland
Engineer	1989	University of Grenoble, France
Teaching Assistant	1986-1988	University of Grenoble, France

E) Field of expertise

- Distributed systems.
- Mobile systems.
- Database systems.
- Web systems and servers.

D) Courses taught

I have taught for more than fifteen years at various universities in Europe (University of Grenoble and Swiss Federal Institute of Technology) and Australia (RMIT University, Queensland University of Technology).

Following are some of the courses I have taught:

- Advanced Client-Server Architectures.
- Fundamental of Distributed Systems.
- Distributed Operating Systems.
- Distributed Database Systems.
- Fundamentals of Database Systems.
- Object-Oriented Database Systems.
- Database Management Systems.
- Knowledge-based Systems.
- Object-Oriented Analysis and Design.
- Structured Analysis and Design.
- Operating Systems.
- Programming Principles.

F) Summary of achievements

RMIT University

As the **head** of the “Distributed Systems and Networking” discipline at School of Computer Science and Information Technology (RMIT University), I manage a group of

- 9 academics staff: A/Prof Peter Bertok, A/Prof George Fernandez, Don Gingrich, A/Prof Jiankun Hu, Dr Ibrahim Khalil, Geoff Leach, Dr Caspar Ryan, Dr Ron van Schyndel, Dr Fabio Zambetta.
- 5 postdoctoral fellows: Dr Mahmood Abdun, Dr Fengling Han, Dr Manish Malhotra, Dr Sathish Rajasekhar, and Dr Mikhail Perepletkhikov.
- Over 20 PhD students.

I am responsible for 20 courses in the area of distributed systems & networking and 6 courses in the area Graphics. I have focussed on improving the teaching quality, the research outcomes, and the local and international reputation of my discipline. Highlights of my recent activities include:

- Published in several prestigious journals and conferences (including ACM and IEEE Transactions, the International Conference on Distributed Computing Systems, and the International Conference on Data Engineering.) I have also written several books.
- Organised major international conferences, and been program committee in several international conferences.
- Built the “Distributed Systems and Networking” discipline from scratch, which has become one of the most successful with the school, both in terms of in teaching and research.
- Graduated several postgraduate students.
- Efficiently supervised and mentored both junior and senior academics within my discipline.
- Have been awarded several major and competitive ARC (Australian Research Council) research grants, including ARC Linkage Grants in 1995, 2001 and 2002, 2003, 2004, ARC Discovery Grants in 2002, 2007 and 2008 and SUN Microsystems Grant in 2002.

Prior to joining RMIT University

Lecturer, Queensland University of Technology (QUT), Australia.

- Taught undergraduate and postgraduate subjects on databases and object-oriented design methods.
- Supervised undergraduate and postgraduate students in the areas of databases and distributed systems.
- Performed high-level theoretical and applied research with international recognition. Applied for and obtained grants (such as collaborative research grants.)

- Involved in an international consultancy project (with Sparkassenorganisation GmBh, Germany), and a national consultancy project (with the National Australia Bank.)
- Served as the organizing chair of the Entity Relationship conference and as referee in several international conferences and journals.

Postdoctoral Fellow, Swiss Federal Institute of Technology (EPFL), Switzerland.

- Taught undergraduate subjects.
- Directed seminars and practical courses.
- Supervised undergraduate projects.
- Supervised masters and PhD students.
- Worked on the SUPER project (Graphical Environment for Entity-Relationship database systems).
- Performed research in the area of conceptual modelling, database inter-operability and graphical interfaces.

Engineer, University of Grenoble (IMAG), France.

- Involved in the European project (Esprit Project I) for the extension of the EPSILON prototype.
- Designed a Help System using a combination of Hypertext and Rule-Based Explanation Techniques.
- Implemented an Interface and the Help System using BimProlog in a Macintosh environment.
- Produced a complete technical report for the European Community.

Teaching assistant, University of Grenoble, France.

- Taught undergraduate subjects.
- Supervised practical courses for undergraduate students.

2. SUMMARY OF RESEARCH OUTCOMES

A) Research Income

Total funds received since 2000:	\$3,421,000
Institutions involved, other than RMIT:	Monash University Melbourne University University of Sydney Queensland University of Technology Deakin University Swinburne University VPAC
RMIT's schools involved:	School of Electrical and Computer Engineering School of Mathematics and Geospatial

1. ARC Linkage Project (2009-2001): *Privacy-Preserving Remote Access to Health Information Infrastructure in Ubiquitous Computing Environments*. P. Bertok (RMIT), **Z. Tari** (RMIT), and L.M. Batten (Deakin U.). Awarded **\$255,000**.
2. ARC Discovery (2009-2011): *Designing for Reliability and Maintainability in Service Oriented Architectures*. **Z. Tari** (RMIT), C. Ryan (RMIT U.) and M. Papazoglou (Tilburg U.). Awarded \$280,000.
3. ARC Linkage Project (2009-2011): *Privacy-Preserving Remote Access to Health Information Infrastructure in Ubiquitous Computing Environments*. P Bertok (RMIT U.), **Z Tari** (RMIT U.) and LM Batten (Deakin U.). Awarded \$265,000.
4. ARC Discovery (2008-2010): *Coordinated and Cooperative Load Sharing between Contentment Delivery Networks*. J. Broberg (Melbourne U.) and **Z. Tari** (RMIT U.). Awarded \$315,000.
5. ARC Linkage Infrastructure Equipment and Facilities (LIEF, 2006): *Enterprise Grid Laboratory*. A. Goscinski (Deakin U.), D. Abramson (Monash U.) and **Z. Tari**, and P. Roe (QUT). Awarded \$320,148.

6. ARC Linkage (2006-2008): Designing an Integrated Infrastructure for Dynamic and Large Scale Supply Chain Applications. **Z. Tari**, C. Fidge (QUT) and A. ter Hofstede (QUT). Awarded \$330,000.
7. ARC Linkage (2004-2007): Designing a Scalable and Efficient Infrastructure for Mobile Service (M-Services). **Z. Tari**, A. Zaslavsky (Monash University) and Jiankun Hu. Awarded \$310,000.
8. ARC Linkage (2004-2007): *Developing a Scalable Infrastructure for Embedded E-Security Incorporating Cryptography and Biometric Authentication*. J. Hu, **Z. Tari**, H. Schroder, S. Boztas (RMIT, School of Mathematics and Geospatial) and H.R. Wu (RMIT, School of Electrical and Computer Engineering). Awarded \$330,000.
9. ARC Discovery (2003-2005): Dynamic Load Distribution for Systems under Heavy Traffic Demand and High Task Size Variation. **Z. Tari**, A. Zomaya (Sydney U.), and H. Schroder. Awarded \$150,000.
10. ARC Linkage (2003-2005): Designing a Scalable and Robust Infrastructure for Highly Dynamic Web Services. **Z. Tari**, A. Zomaya (Sydney U.), and B. Appelbe (VPAC). Awarded \$244,000.
11. SUN Microsystems grant (2003). **Z. Tari** and P. Bertok. Awarded \$100,000.
12. VIPAC Teaching Grant (2003): High Performance for Computer Science Students. Bevinakoppa, H. Schroder, and **Z. Tari**. Awarded \$12,000.
13. ARC Linkage Project (2002-2004): Developing Robust Mobile Middleware for Large Scale Distributed On-line Applications. **Z. Tari**, B. Appelbe (VPAC), R. Mullings (PI, CMS), and G. Walmsley (PI, CMS). Awarded \$210,000.
14. VIPAC grant (2001): *High Performance CORBA*. **Z. Tari**. Awarded \$25,000.
15. ARC Small Grant (2000): *Database Wrappers for Distributed Object Systems*. **Z. Tari**. Awarded \$25,000.
16. ARC Collaborative Research Grant (1995-1997): *An Information Security Model for the Finance and Banking Sector*. D. Longley (QUT), A. Anderson (QUT) and **Z. Tari**. Awarded \$240,000.
17. QUT Grant (1994): *A Multi-Paradigm based Methodology for Software Development*. **Z. Tari**. Awarded \$10,000.

B) HDR (High Degree by Research) Training

HDR Completions

Total PhD students	24
# Completions as 1 st supervisor:	15
# Current students (not yet graduated)	7

1. Dr **Xue Li**. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Professor Mike Papazoglou). Graduated in 1996 at QUT University on the topic of “*Method Evolution in Database Systems*”. Dr Li is currently holding a senior lecturer position at Queensland University.
2. Dr **David Edmond**. [Supervisors] 1st supervisor (Professor Mike Papazoglou) and 2nd supervisor (Zahir Tari). Graduated in 1998 at QUT University on the topic of “*Towards Reflective Distributed Systems*”. Dr Edmond is currently holding a position of senior lecturer at QUT University.
3. Dr **Iztok Savnik**. [Supervisors] 1st supervisor (Tomaz Mohoric) and 2nd supervisor (Zahir Tari). Graduated in 1998 at University of Ljubljana on the topic of “*Query Language for Complex Objects*”. Dr Savnik is currently holding a manager position in one company in Ljubljana.
4. Dr **Surya Nepal**. [Supervisors] 1st supervisor (Dr Rama Ramakrishna) and 2nd supervisor (Zahir Tari). Graduated in 2000 at RMIT University on the topic of “*Data Model and Query Languages for Multimedia Databases*”. Dr Nepal is a lecturer in one of the universities in New Zealand.
5. Dr **Gregory Craske**. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (James Thom). Graduate in December 2004 on the topic of “*An Open Object Trading Service that Supports Service Aggregation*”. Dr Craske is currently holding a research associate position in my research group. He is working in the area of scalable Web service platforms.

6. Dr **Andrew Fry**. [Supervisor] 1st supervisor (Zahir Tari) and 2nd supervisor (Hugh Williams). Graduated in March 2005 on the topic of “Advanced Transaction Models for Distributed Systems”. Dr Fry is currently Spotless Services Australia as a Senior Analyst Programmer.
7. Dr **Kwong Lai**. [APA] [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Dr Peter Bertok). Submitted his PhD in January 2004 on the topic of “*Caching Techniques for Mobile Computing in Wireless Environments.*” Dr Lai is currently holding a research associate position in my research group. He is working in the area of mobile services.
8. Dr **Abhinav Avora**. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Dr Peter Bertok). Submitted his PhD thesis in May 2005 on the topic of “*Data Stashing Strategies for Disconnected and Partially Connected Mobile Environments.*”
9. **Peter Dimopoulos**. [APA] [Title] *Dynamic Load Balancing Geographically Distributed Web Servers*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (A/Prof Panlop Zeephongsekul, School of Mathematics and Geospatial). [Dates] January 2003 (enrolment) and November 2005.
10. **James Broberg**. [Title] *Dynamic Load Balancing for Systems Under Heavy Traffic and High task variation*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (A/Prof Panlop Zeephongsekul, School of Mathematics and Geospatial). [Dates] January 2003 (enrolment) and November 2005.
11. **Islam Elgedawy**. [APA] [Title] *Advanced Service Discovery Protocols for Web Services Platforms*. 1st supervisor (Zahir Tari) and 2nd supervisor (Dr James Thom). [Dates] January 2003 (enrolment) and December 2006.
12. **Bin Rong**. [APA][Title] *Video Streaming in Wireless Networks*. [Supervisors] 1st supervisor (Dr Ibrahim Khalil) and 2nd supervisor (Zahir Tari). [Dates] July 2004 (enrolment) and June 2008.
13. **Sakib Kazi**. [Title] *Routing in Sensor Networks*. 2004. 2nd supervisor. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Dr Ibrahim Khalil). [Dates] July 2004 (enrolment) and September 2008.
14. **Anh Phan**. [Title] *Improving SOAP Performance through Caching and Load Balancing*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Dr Kwong Lai). [Dates] March 2005 (enrolment) and November 2008.
15. **Nalaka Gooneratne**. [APA][Title] *Service Matching for Composite Web Services*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (A/Professor James Harland). [Dates] January 2005 (Enrollement) and September 2008.
16. **Sathish Rajasekhar**. [PT student] [Title] *Advanced QoS Routing Protocols for Large Networks*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd supervisor (Dr Khalil Ibrahim). [Dates] March 2000 (enrollment) and June 2008.
17. **Mikhail Perepletchikov**. [Title] *A Methodology for Designing and Implementing Service-Oriented Architectures*. [Supervisors] 1st supervisor (Dr Caspar Ryan) and 2nd supervisor (Zahir Tari). [Dates] 2005 (enrolment) and December 2008.

Current HDR students

18. **Palka Arora**. [Title] *Security in SCADA systems (access control)*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd [Dates] January 2007 (enrolment) and December 2011 (submission).
19. **Sunidhi Bhalla**. [Title] *Security in Web Services*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (Peter Bertok). [Dates] January 2007 (enrolment) and December 2009(submission).
20. **Vidura Gamini Abhaya**. [Title] *Extending SOAP to support Real-time Processing*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (Peter Bertok). [Dates] January 2007 (enrolment) and June 2010 (submission).
21. **Malith Jayasinghe**. [Title] *Dynamic Load balancing in Web Servers*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (James Broberg). [Dates] January 2007 (enrolment) and March 2010 (submission).
22. **Anshuman Mukherjee**. [Title] *Dynamic Verification of Service-based Protocols*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (Peter Bertok). [Dates] January 2007 (enrolment) and March 2010 (submission).

23. Carlos Alexnadre Queiroz . [Title] *Survability in SCADA environments*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (Dr Abdun Mahmood). [Dates] January 2008 (enrolment) and December 2011 (submission).
24. Dhiah Al-Shammary. [Title] *On the Performance of Realtime SOAP*. [Supervisors] 1st supervisor (Zahir Tari) and 2nd Supervisor (Peter Bertok). [Dates] January 2009 (enrolment) and Decembre 2013 (submission).

C) Research Publications

Professor Tari has published over 120 papers and edited more than 15 books. He regularly publishes in prestigious journals (like IEEE / ACM Transactions) and conferences (like WWW, ICDCS etc.). He edited over 15 conference books (with Springer Verlag) and has been the PC members of over 10 conferences every year.

BOOKS (edited)

- Distributed Object Computing: The CORBA perspective. Zahir Tari (RMIT University, Australia) and Omran Bukhres (Purdue University, USA). John Wiley, 2001.
- Database Security: Status and Prospect. Bhavani Thuraisingham (MITRE), Klaus R. Dittrich (University of Zurich) and Zahir Tari (RMIT). Kluwer, 2001.
- Advances in Object-Oriented Data Modelling. Mike Papazoglou (Tilburg University, The Netherlands), Stefano Spaccapietra (Swiss Federal Institute of Technology, Switzerland) and Zahir Tari (RMIT, Australia). MIT Press, 2000.
- Semantics of Multimedia Systems. Robert Meersman (Free University of Brussels), Zahir Tari (RMIT University) and Scott Stevens (Carnegie Mellon University). Kluwer, 1999.

BOOKS (Proceedings)

- Springer-Verlag Proceedings of the OTM (OnTheMove) 2008 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.). see <http://www.cs.rmit.edu.au/fedconf>
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2007 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2006 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2005 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2004 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2004 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2003 Federated Conferences. Robert Meersman (Free University of Brussels), Zahir Tari (RMIT University) and Douglas Schmidt (University of California at Irvine) (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2003 Workshops. Robert Meersman (Free University of Brussels) and Zahir Tari (RMIT University) (Eds.).
- ICEIS Press 2003 Proceeding of the International Workshop on “Web Services: Modelling, Architecture and Infrastructure”. Jean Bézin, Jiankun Hu and Zahir Tari (Eds.).
- Springer-Verlag Proceedings of the OTM (OnTheMove) 2002 Federated Conferences. Robert Meersman (Free University of Brussels) and Zahir Tari (Eds.).

- IEEE Proceedings of the 2001 International Symposium of Distributed Objects and Applications (DOA). Gordon Blair (Lancaster University), Douglas Schmidt (University of California at Irvine) and Zahir Tari (RMIT University).
- IEEE Proceedings of the 2000 International Symposium of Distributed Objects and Applications (DOA). Zahir Tari (RMIT University), Pamela Drew (Boeing), Roberto Zicari (University of Frankfurt).
- IEEE Proceedings of the 1999 International Symposium of Distributed Objects and Applications (DOA). Zahir Tari (RMIT University), Robert Meersman (Free University of Brussels), Pamela Drew (Boeing) and Richard Soley (OMG).

BOOK CHAPTERS

1. C. Mahmood, C. Leckie, J. Hu, **Z. Tari** and M. Atiq: *Network Traffic Monitoring - Application to SCADA Security*. In: *Springer Handbook Communication and Information Security*, Springer Verlag. (in press, accepted 02/2009).
2. J. Hu, P. Bertók, and **Z. Tari**: *Taxonomy and Framework for Integrating Dependability and Security*. In: *Information Assurance: Dependability and Security in Networked Systems*, Y. Qian, D. Tipper, P. Kirshnamurthy and J. Joshi (eds.), Morgan Kaufman, pp. 149-170, November 2007.
3. A. Bedford, P. Zeephongsekul, J. Broberg, P. Dimopoulos, and **Z. Tari**: *Queuing Theory Applications to Communication Systems: Control of Traffic Flows and Load Balancing*. In: *Handbook of Engineering Statistics*, H. Pham (ed.), Springer Verlag, pp. 991-1020, July 2006.
4. **Z. Tari**: *ARM++ - A Hybrid Association Rule Mining Algorithm*. In: *Handbook of Nature-Inspired and Innovative Computing*, A. Zomaya (ed), Springer Verlag, pp. 45-76, 2006.
5. **Z. Tari**, P. Bertók and A. Vora: *Towards Robust Mobile Middleware for Large Scale Distributed On-line Applications*. L. Ee Peng and K. Siau (eds.), Idea-Group Publishing, pp. 112-136, 2003.
6. **Z. Tari**, S. Setiawan and K. Tari: *CODAR - A POA-based CORBA Database Adaptor for Web Service Infrastructures*. D. Taniar (eds.), Idea-Group Publishing, pp. 266-298, 2003.
7. P. Chrysanthis, **Z. Tari**, and O. Bukhres: *Transaction Management in Databases*. *Handbook on Data Management in Information Systems*, Vol. 3, J Blazewicz, W Kubiak, T Morzy, M Rusinkiewicz (eds), Springer Verlag, 2001.
8. **Z. Tari**, O. Bukhres and G. Craske: *Teaching Object-Oriented Databases*. In: "Succeeding with Object Databases", A. B. Chaudhri and R. Zicari (eds.), Wiley & Sons, 2000.
9. **Z. Tari**, O. Bukhres, J. Stokes, and S. Hammoudi: *The Reengineering of Relational Databases based on Key and Data Correlation*. S Spaccapietra and F Maryanski (eds.), Chapman & Hall, 1998, pp. 184-218.
10. **Z. Tari**: *Designing Secure Agents for the DOK Federated System*. RY Lin and C Qian (eds), Chapman & Hall, 1998, pp. 35-59.
11. **Z. Tari** and G. Fernandez: *Security Enforcement in the DOK Federated Database System*. P Samarati and R Sandhu (eds.), Chapman & Hall, 1997, pp. 23-42.
12. **Z. Tari**: *Aggregation in Federated Databases - The DOK Approach*. In: *Cooperative Database Systems for Advanced Applications*, Y Kambayachi and K Yokota (eds.), World Scientific Co., 1997, pp. 100-108.
13. M. Papazoglou, **Z. Tari**, and N. Russell: *Object-Oriented Technology for Inter-Schema and Language Mappings*. In: *Object-Oriented Multidatabase Systems: A Solution for Advanced Applications*, O Bukhres and A K Elmagarmid (eds), Prentice Hall, 1995, ISBN 0-13- 103813-2, pp. 203-245.
14. **Z. Tari**: *Interoperability between New Database Languages*. In: *Interoperable Database Systems*, DK Hsiao, EJ Neuhold, R Sacks-Davis (eds), IFIP, North Holland, 1993, pp. 101-118.

JOURNAL papers

15. J. Broberg, R. Buyya and Z. **Tari**: *MetaCDN - Harnessing 'Storage Clouds' for High Performance Content Delivery*. Journal of Network and Computer Applications (JNCA), Elsevier. (in press, accepted in March 2009).
16. A. Phan, Z. **Tari**, and P. Bertok: *Similarity-Based SOAP Multicast Protocol to Reduce Bandwidth and Latency in Web Services*. IEEE Transactions on Services Computing (TSC), 1(2):88-103, April-June 2008.
17. Elgedawy, Z. **Tari**, J. Thom: *Correctness-Aware High-Level Functional Matching Approaches For Semantic Web Services*. ACM Transactions on the Web (TWEB), 2(2), 2008.
18. P. Dimopoulos, P. Zeephongsekul, and Z. **Tari**: *A Dynamic Priority Approach to Reducing Delay in Interactive TCP Connections*. Journal of Telecommunication Systems (TS), 34(1-2):59-70, 2007.
19. J. Broberg, Z. **Tari**, and P. Zeephongsekul: *Task assignment with Work-Conserving Migration*. International Journal on Parallel Computing (Elsevier), 32(11-12):808-830, December 2006.
20. Z. **Tari**, P. Bertók and D. Semic: *A Dynamic Label Checking Approach for Information Flow Control in Web Services*. International Journal of Web Services Research (JWSR), pp. 1-28, January 2006.
21. K. Lai, Z. **Tari**, and P. Bertók: *An Analytical Study of Cache Invalidation Algorithms in Mobile Environments*. International Journal of Pervasive Computing and Communications (JPCC), 2006.
22. R. Buyya, A.K. Pathan, J. Broberg, and Z. **Tari**: *A Case for Peering of Content Delivery Networks*. IEEE Distributed Systems Online, 7(10), 2006.
23. K. Lai, Z. **Tari**, P. Bertók: *Supporting User Mobility through Cache Relocation*. International Journal on Mobile Information Systems (MIS), Special Issue on "When Location-based Services Meet Databases", 1(2), November 2005.
24. Z. **Tari**, M. Malhotra and M. McKinlay: *Towards the Right Communication Protocol for Web Services*. International Journal on Web Services Research (JWSR), 2(2):19-42, 2005.
25. Z. **Tari**, J. Broberg, A. Zomaya, and R. Baldoni: *A Least Flow Time First Load Sharing Approach for Distributed Server Farm*. Elsevier International Journal on Parallel and Distributed Systems (JPDC), 65(7):832-842, 2005.
26. M. Malhotra and Z. **Tari**: *MIDAS - An Integrated E-Commerce Solution for Australian Transport Industries*. Journal of Web Engineering and Technology (IJWET), 1(3), 353-373, October 2004.
27. Z. **Tari** and A. Fry: *Controlling Aggregation in Distributed Object Systems: A Graph-based approach*. IEEE Transactions on Parallel and Distributed Systems (TPDS), 12(12), pp. 1236-125, 2001.
28. Z. **Tari**, H. Hamidjadja and Q. Lin: *Cache Management in CORBA Distributed Object Systems*. IEEE Concurrency, July-September, 8(3), pp. 48-55, 2000.
29. Z. **Tari**, X. Li, and L. Liu: *Type Safety in the Context of Method Updates*. Kluwer International Journal on Intelligent Information Systems (JIIS), 13(3), 1999, pp. 279-298
30. Z. **Tari** and G. Craske: *A Context-based Approach for the CORBA Trading Service*. IEICE Transactions on Information Systems, volume E-82-D, no.1, 1999, pp. 208-223.
31. I. Savnik, Z. **Tari** and T. Mohoric: *QAL - A Query Algebra for Complex Objects*. Data and Knowledge Engineering (DKE), 30(1), pp. 57-94, May 1999.
32. Z. **Tari** and G. Craske: *Context-based Approach for the CORBA Trading Service*. IEICE Transactions on Information Systems, Volume E-82-D, Number 1, 1999, pp. 208-223.
33. A. Zaslavsky and Z. **Tari**: *Mobile computing: Overview and Current Status*. Australian Computer Journal (ACJ), 30(2), May 1998, pp. 42-52.
34. Z. **Tari**, J. Stokes and S. Spaccapietra: *Object Normal Forms and Dependency Constraints for Object-Oriented Schemata*. ACM Transactions on Database Systems (TODS), 22(4), pp. 513-569, Dec. 1997.
35. Z. **Tari** and S. W. Chan: *A Role-based Access Control for Intranet Security*. IEEE Internet Computing, 1(5), 1997, pp. 24-34.
36. Z. **Tari**: *Using Agents for Secure Access to Data within Federated Environments*. IEEE Communications, 1997, pp. 136-140.
37. D. Edmond, M. Papazoglou and Z. **Tari**: *An Overview of Reflection and its Use in Cooperation*. International Journal of Intelligent and Cooperative Information Systems, 4(1), 1995, pp. 3-44.

CONFERENCE papers

38. M. Jayasinghe, Z. **Tari**, and P. Zeephongsekul: *The Impact of Quanta on the Performance of Multi-level Time Sharing Policy under Heavy-tailed Workloads*. Proceedings of 13th Australasian Computer Science Conference (ACSC), pp. 83-91, 2009.
39. N. Gooneratne and Z. **Tari**: *Matching Independent Global Constraints for Composite Web services*. Proceedings of 17th International Conference on World Wide Web (WWW), pp. 765-774, 2008.
40. N. Gooneratne, Z. **Tari**, James Harland: *VGC - Generating Valid Global Communication Models of Composite Services Using Temporal Reasoning*. Proceedings 6th International Conference Service-Oriented Computing (ICSOC), pp. 585-591, 2008.
41. J. Broberg and Z. **Tari**: *MetaCDN - Harnessing Storage Clouds for High Performance Content Delivery*. Proceedings 6th International Conference Service-Oriented Computing (ICSOC), pp. 730-731, 2008. [[This is a **demo** paper on MetaCDN]]
42. B. Rong, I. Khalil, and Z. **Tari**: *QoS-aware Application Layer Multicast*. Proceedings of 13th IEEE Symposium on Computers and Communications (ISCC), pp. 1029-1033, 2008.
43. K.A. Phan, Z. **Tari**, and P. Bertók: *eSMP - A Multicast Protocol to Minimize SOAP Network Traffic in Low Bandwidth Environments*. Proceedings of 32th Annual IEEE Conference on Local Computer Networks (LCN), pp. 95-106, 2007.
44. N. Gooneratne, Z. **Tari**, and J. Harland: *Verification of Web Service Descriptions Using Graph-based Traversal Algorithms*. Proceedings of the ACM International Conference on Applied Computing (SAC), pp. 1385-1392, 2007.
45. N. Gooneratne, Z. **Tari**, and J. Harland: *Matching Strictly Dependent Global Constraints for Composite Web Services*. Proceedings of the 5th European Conference on Web Services (ECWS), 2007
46. M. Pereplechikov, C. **Ryan**, K. Frampton, and Z. **Tari**: *Coupling Metrics for Predicting Maintainability in Service-Oriented Designs*. Proceedings of the Australian Conference on Software Engineering (ASWEC), pp. 329-340, 2007.
47. B. Rong, I. Khalil, and Z. **Tari**: *An Adaptive Membership Algorithm for Application Layer Multicast*. Proceedings of the International Conference on Networking and Services (ICNS), pp. 35-40, July 2006.
48. B. Rong, I. Khalil, and Z. **Tari**: *Reliability Enhanced Large-Scale Application Layer Multicast*. Proceedings 49th Annual IEEE Global Telecommunications Conference (Globecom), November 2006.
49. B. Rong, I. Khalil, and Z. **Tari**: *Making Application Layer Multicast Reliable is Feasible*. Proceedings 31st Annual IEEE Conference on Local Computer Networks (LCN), pp. 483-490, 2006.
50. P. Rossi and Z. **Tari**: *Software Adaptation for Service-Oriented Systems*. Proceedings of the International Middleware for Service Oriented Computing (MW4SOC), pp. 12-17, 2006.
51. P. Rossi and Z. **Tari**: *Software Metrics for the Efficient Execution of Mobile Services*. Proceedings of the International Workshop on Emerging Web Services Technology (WEWSTE), pp. 122-137, 2006.
52. P. Dimopoulos, P. Zeephongsekul, and Z. **Tari**: *Multipath Aware TCP*. Proceedings of the IEEE Symposium on Computers and Communications (ISCC), pp. 891-898, 2006.
53. A. Phan, Z. **Tari**, and P. Bertók: *Optimizing Web Service Performance by Using Similarity-based Multicast Protocol*. Proceedings of the 4th IEEE European Conference on Web Services (ECWS), pp. 119-128, 2006.
54. A. Phan, Z. **Tari**, and P. Bertók: *Enhanced SOAP Performance For Mobile Applications*. Proceedings of the 21st Annual ACM Symposium on Applied Computing (SAC), pp. 1139-1144, April 2006.
55. S. Rajasekhar, I. Khalil, and Z. **Tari**: *Probabilistic QoS Routing in WiFi P2P Networks*. Proceedings of 20th IEEE International Conference on Advanced Information Networking and Applications (AINA), pp. 811-816, April 2006.
56. S. Rajasekhar, B. Rong, K. Lai, I. Khalil, and Z. **Tari**: *Load Sharing in P2P Networks Using Dynamic Replication*. Proceedings of the IEEE 20th International Conference on Advanced Information Networking and Applications (AINA), pp. 1011-1016, April 2006.
57. S.K. Muheymin, Z. **Tari**, and I. Khalil: *Energy Balancing in the Self-Configuring Sensor Networks*. Proceedings of the 2nd International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 39-44, December 2005.

58. I. Elgedawy, Z. **Tari**, and J. Thom: *High Level Functional Matching for Semantic Web Services*. Proceedings of the International Conference on Service Oriented Computing (ICSOC), pp. 115-129. December 2005. **BEST PAPER AWARD**.
59. K. Lai, A. Phan, and Z. **Tari**: *Efficient SOAP Binding for Mobile Web Services*. Proceedings of the 30th Annual IEEE Conference on Local Computer Networks (LCN), pp. 218-225, 2005.
60. K. Y. Lai, Z. **Tari**, and P. Bertók: *Improving Data Accessibility For Mobile Clients Through Cooperative Hoarding*. Proceedings of International Conference and Data Engineering (ICDE), pp. 415-416, 2005.
61. B. Rong, I. Khalil, and Z. **Tari**: *A Gossip-based Membership Management Algorithm for Large-Scale Peer-to-Peer Media Streaming*. Proceedings of the 30th Annual IEEE Conference on Local Computer Networks (LCN), pp. 486-487, 2005.
62. P. Dimopoulos, P. Zeephongsekul, Z. **Tari**: *Reducing the User Perceived Delay of Interactive TCP Connections Using a Dynamic Priority Approach*. Proceedings of 14th International Conference on Computer Communications and Networks (ICCCN), 421-427, October 2005.
63. K. Lai, Z. **Tari**, and P. Bertók: *Supporting Disconnection Operations Through Cooperative Hoarding*. Proceedings of the International Conference on Computer Communications and Networks (ICCCN), October 2005.
64. M. Pereplechikov, C. **Ryan**, and Z. **Tari**: *The Impact of Software Development Strategies on Project and Structural Software Attributes in SOA*. Proceedings of the 2nd INTEROP Network of Excellence Dissemination Workshop (INTEROP), pp. 442-451, October 2005.
65. D. Chatterjee, Z. **Tari**, and A.Y. Zomaya: *A Task-Based Adaptive-TTL Approach for Web Server Load Balancing*. Proceedings of the 10th IEEE Symposium on Computers and Communications (ISCC), pp. 877-884, June 2005.
66. K. Lai, Z. **Tari**, and P. Bertók: *Improving Data Accessibility For Mobile Clients Through Cooperative Hoarding*. Proceedings of the International Conference on Data Engineering (ICDE), pp. 415-416, April 2005.
67. J. Broberg, Z. **Tari**, and P. Zeephongsekul: *Task Assignment based on Prioritizing Traffic Flows*. Proceedings of the International Conference on Principles of Distributed Systems (OPODIS), pp. 415-430, June 2005.
68. S. Rajasekhar, I. Khalil, and Z. **Tari**: *A Scalable and Robust QoS Architecture for WiFi P2P Networks*. Proceedings of the International Conference on Distributed Computing & Internet Technology (ICDCIT), pp. 65-74, 2004.
69. I. Elgedawy, Z. **Tari**, and M. Winikoff: *Scenario Matching Using Functional Substitutability in Web Services*. Proceedings of the International Conference on Web Information Systems Engineering (WISE), pp. 59-65, November 2004.
70. I. Elgedawy, Z. **Tari**, and M. Winikoff: *Exact Functional Context Matching for Web Services*. Proceedings of the International Conference on Service Oriented Computing (ICSOC), pp. 143-152, November 2004.
71. K. Y. Lai, Z. **Tari** and P. Bertók: *A Mobility-Aware Cache Replacement Strategy for Location Dependent Information Services*. Proceedings of IEEE Globecom, November 2004.
72. K. Y. Lai, Z. **Tari** and P. Bertók: *Mobility-Aware Cache Replacement for Users of Location-Dependent Services*. Proceedings of IEEE Conference on Local Computer Networks (LCN), pp. 50-58, November 2004.
73. A. Vora, Z. **Tari** and P. Bertók: *A Hoarding Approach for Supporting Disconnected Write Operations in Mobile Environments*. Proceedings of 23rd Symposium on Reliable Distributed Computing (SRDC), pp. 276-288, October 2004.
74. P. Dimopoulos, P. Zeephongsekul, and Z. **Tari**: *Modelling the Burstiness of the TCP Protocol*. Proceedings of 12th Annual Meeting of the IEEE/ACM International Symposium in Modelling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS), pp. 175-183, October 2004.
75. R. Wonohoesodo and Z. **Tari**: *A Role based Access Control for Web Services*. Proceedings of IEEE International Conference on Services Computing (SCC), pp. 49-56, September 2004.

76. M.S. Peerbocus and Z. **Tari**: *A Workflow-based Dynamic Scheduling Approach for Web Services Platforms*. Proceedings of the International Conference on Computers and Communication (ISCC), 2004.
77. K. Lai, Z. **Tari** and P. Bertók: *An Analytical Study of Object Relocation Strategies for Wireless Environments*. Proc. of the International Conference on Computers and Communication (ISCC), pp. 1091 – 1097, June 2004.
78. K. Lai, Z. **Tari** and P. Bertók: *Improving Cache Performance in Mobile Computing Networks through Dynamic Object Relocation*. Proceedings of the International Conference on Parallel and Distributed Systems (ICPADS), pp. 37-45, July 2004.
79. M. Malhotra and Z. **Tari**: *MIDAS's Routing and Scheduling Approach for the Australian Transport Industries*. Proceedings of the OTM (OnTheMove) Workshops, pp. 84-97, 2003.
80. A. Vora, Z. **Tari** and P. Bertók: *A Variable Cache Consistency Protocol for Mobile Systems Using Time Locks*. Proceedings of Distributed Applications and Interoperable Systems (DAIS), pp. 153-166, 2003.
81. K.Y. Lai, Z. **Tari** and P. Bertók: *Maintaining Cache Consistency in Large Scale Mobile Computing Systems*. Proceedings of the International Conference on Cooperative Information Systems (CoopIS), pp. 555-574, 2003.
82. B. Fu, J. Broberg and Z. **Tari**: *Task Assignment Strategy for Overloaded Systems*. Proceedings of the IEEE Symposium on Computers and Communications (ISCC), pp. 1119-1125, 2003.
83. K. Lai, Z. **Tari**, and P. Bertók: *Cost Efficient Broadcast Based Cache Invalidation for Mobile Environments*. Proceedings of 18th ACM International Conference on Applied Computing (SAC), pp. 871-877, 2003.
84. B. Fu and Z. **Tari**: *A Dynamic Load Distribution Strategy for Systems Under High Task Variation and Heavy Traffic*. Proceedings of 18th ACM International Conference on Applied Computing (SAC), pp. 1031-1037, 2003.
85. Z. **Tari**, M. McKinlay and M. Malhotra: *An XML-based Conversational Protocol for Web Services*. Proceedings of 18th ACM International Conference on Applied Computing (SAC), pp. 1179-1184, 2003.
86. Z. **Tari**, M. Malhotra and M. McKinlay: *Towards Robust and Scalable Infrastructure for Web Services*. Proceedings of the International IEEE Symposium on Signal Processing and Information Technology (ISSPIT), Dec. 2002.
87. M. McKinlay and Z. **Tari**: *DynWES - A Dynamic and Interoperable Protocol for Web Services*. Proceedings of the International Symposium on Electronic Commerce, North Carolina, pp. 74-86, 2002.
88. A. Vora, Z. **Tari**, P. Bertok and K. Lai: *Mobile Consistency Protocol Using Shearable Read/Write Time Locks*. Proceedings of International Conf. on Parallel and Distributed Systems (ICPADS), Taiwan, pp. 284-292, 2002.
89. L. Tan and Z. **Tari**: *Dynamic Task Assignment in Server Farms—Better Performance by Task Grouping*. Proceedings of the International Symposium on Computers and Communications (ISCC), Taormina (Italy), July 2002.
90. P. Chou and Z. **Tari**: *Predicate-Based Caching Scheme for Wireless Environments*. Proceedings of International Conference on Enterprise Information Systems, Spain, pp. 57-64, 2002.
91. Z. **Tari**, V. Dupin and K. Tari: *Designing a Query and Object Cache Management System for CODAR Database Adapter*. Proceedings of International Conference on Enterprise Information Systems, Spain, pp. 290-297, 2002.
92. Z. **Tari** and H. Hamidjaja: *A CORBA Cooperative Cache Approach with Popularity Admission and Routing Mechanism*. Proceedings of Australian Database Conference, pp. 177-187, 2002.
93. Z. **Tari** and V. Pande: *Dynamic Workflow Management in CORBA Distributed Object Systems*. Proceedings of International Symposium on Software Engineering for Parallel and Distributed Systems (PDSE), Limerick, pp. 51-65, 2000.
94. Z. **Tari**, Q.T. Lin and H. Hamidjadja: *A Caching Approach to improve CORBA Performance*. Proceedings of International Workshop on Internet 2000 (IWI200), Taipei, pp. A51-A58, 2000.
95. Z. **Tari** and G. Craske: *A Query Propagation Approach to Improve CORBA Trading Service Scalability*. Proceedings of International Conference on Distributed and Computer Systems (ICDCS), Taiwan, pp. 504-511, 2000.

96. S. Wagner and Z. **Tari**: *A Caching Protocol to Improve CORBA Performance*. Proceedings of Australian Database Conference (ADC), Canberra, pp. 140-148, 2000.
97. Z. **Tari**, S. Hammoudi and S Wagner: *A CORBA Object-based Caching with Consistency*. Proceedings of International Conference on Database and Expert System Applications (DEXA), Florence, pp. 322-331, 1999.
98. G. Craske, Z. **Tari** and K. Kumar: *DOK-Trader - A CORBA Persistent Trader with Query Routing Facilities*. International Symposium on Distributed Objects and Applications (DOA), Edinburgh, pp. 230-241, 1999.
99. G. Craske and Z. **Tari**: *A Property-based Clustering Approach for the CORBA Trading Service*. Proceedings of International Conference on Distributed and Computer Systems (ICDCS), Texas, pp. 517-527, 1999.
100. A. Zaslavsky, Y.M. Sung and Z. **Tari**: *Achieving Reliability of Distributed Applications in a Wireless Multi-Network Environment*. Proceedings of International Conference on Parallel and Distributed Systems (PDCS), Las Vegas, October 1998.
101. B. Fan, K. Kumar and Z. **Tari**: *An Efficient Trader Using Attribute Clustering Technique in Distributed Object Systems*. Proceedings of International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA), Las Vegas, 1998.
102. I. Savnik and Z. **Tari**: *Querying Objects with Complex Static Structure*. Proceedings of International Conf. on Flexible Query Answering Systems (FQAS), Roskilde (Denemark), May 1998.
103. B. Benatallah and Z. **Tari**: *Dealing with Version Pertinence to Design an Efficient Schema Evolution Framework*. Proceedings of International Database Engineering and Application Symposium (IDEAS), Cardiff (UK), July 1998.
104. X. Li and Z. **Tari**: *Managing the Versioning of Complex Objects in the Presence of Polymorphism*. Proceedings of Australian Database Conference (ADC), Perth, pp. 117-128, 1998.
105. Z. **Tari**, A. Zaslavsky, H. Shmidt, I. Savnik and W. Cheng: *Towards Cooperative Databases: A Distributed Object Approach*. Proceedings of the International Conf. on Information, Systems, Analysis and Synthesis (ISAS), Caracas, 1997.
106. Z. **Tari** and J. Stokes: *Designing the Reengineering Service for the DOK Federated Database System*. Proceedings of the IEEE International Conf. on Data Engineering (ICDE), Birmingham, pp. 465-479, 1997.
107. Z. **Tari**: *A Framework for Aggregation Detection in Federated Databases*. Proceedings of the Australian Computer Science (ACS) conference, Sydney, pp. 287-296, 1997.
108. Z. **Tari**, W. Cheng, K. Yetongnon and I. Savnik: *Towards Cooperative Databases: The DOK Approach*. Proceedings of the International Conf. on Parallel and Distributed Computing Systems (PDCS), Dijon, pp. 595-600, 1996.
109. Z. **Tari**, K. Yetongnon, I. Savnik, W Cheng and G Fernandez: *The DOK Project -- Towards the Integration of Heterogeneous and Distributed Multimedia Databases*. Proceedings of the Int Conf. on Information, Systems, Analysis and Synthesis (ISAS), Orlando, pp. 852-860, 1996.
110. I. Savnik and Z. **Tari**: *Querying Object-Oriented Databases*. Proceedings of the DEXA Workshop, Zurich, pp. 384-390, 1996.
111. I. Savnik, Z. **Tari**, and T. Mohoric: *Using Schema Information for Querying Databases*. Proceedings of the International Workshop on Reasoning about Structured Objects: Knowledge Representation Meets Databases, Bielefeld, Germany, 1995.
112. D. Edmond, M. Papazoglou, N. Russel and Z. **Tari**: *Packaging Knowledge into Meta-objects*. Proc of the Int Workshop on Reasoning about Structured Objects: Knowledge Representation Meets Databases, Bielefeld, Germany, 1995.
113. D. Edmond, M. Papazoglou, and Z. **Tari**: *R-OK: A Reflective Model for Distributed Object Management*. Proceedings of the International Workshop on Research Issues in Data Engineering (RIDE), Taiwan, pp. 34-41, 1995.
114. D. Edmond, M. Papazoglou and Z. **Tari**: *Using Reflection as a Means of Achieving Cooperation*. Proceedings of the Workshop on Heterogeneous Knowledge Bases, Tokyo, 1994.
115. Z. **Tari** and Z. Li: *Method Restructuring and Consistency Checking in Object-Oriented Systems*. Proceedings of International Conf. in Entity Relationship Conference, Manchester, pp. 152-170, 1994.

116. X. Li and Z. **Tari**: *Consistency Checking of Evolving Methods*. Proceedings of International Conf. on Database and Expert Systems Applications (DEXA), Athens, Springer Verlag, pp. 135-144, 1994.
117. Z. Tari: *ERC++: A Conceptual Model based on Object and Logic Paradigms*. Proceedings of ACM Conf. on Information and Knowledge Management (CIKM), Washington, pp. 625-634, 1993.
118. Z. **Tari**: *On the Design of Object-Oriented Databases*. Proceedings of the 11th International Conf. on Entity Relationship Approach (ERA), Karlsruhe, pp. 389-405, 1992.
119. Z. Tari: *Designing Object-Oriented Databases with a Semantic Data Model and a Rule Model*. Proceedings of the International Conf. On Database and Expert Systems Applications (DEXA), Valencia, pp. 108-114, 1992.
120. Z. **Tari** and A. Haddak: *A Practical Approach for Designing Object-Oriented Databases*. Proceedings of the Second International Conf. Computer Science Conference (ICSC), Data and Knowledge Engineering: Theory and Applications, Hong Kong, 1992.
121. A. Auddino, Y. Dennebouy, Y. Dupont, E. Fontana, S. Spaccapietra and Z. **Tari**: *SUPER-Visual Interaction with an Object-Based ER Model*. Proceedings of the International Conf. on Entity Relationship Approach (ERA), Karlsruhe, pp. 340-356, 1992.
122. A. Auddino, E. Amiel, Y. Dennebouy, Y. Dupont, E. Fontana, S. Spaccapietra and Z. **Tari**: *Database Visual Environments Based on Advanced Data Models*. Proceedings of the International Conf. On Advanced Visual Interfaces (AVI), Roma, 1992
123. A. Auddino, Y. Dennebouy, Y. Dupont, E. Fontana, S. Spaccapietra and Z. **Tari**: *SUPER: a Comprehensive Approach to DBMS Visual User Interfaces*. Proceedings of the International Conf. on Visual Database Systems, Budapest, 1991.

Other evidence of impact and contributions to the field

CI **Tari** is a senior IEEE and ACM member who is actively involved in the international research community. Together with Professor Robert Meersman of the Free University of Brussels, CI Tari is the **founder** of the On The Move (OTM) federated event that integrates a number of major international conferences in order to unite researchers from various backgrounds and examine the problems of distributed information systems in a broader academic and industrial context. OTM has grown to five conferences, the combined proceedings of which are published by Springer: CoopIS (Cooperative Information Systems); ODBASE (Ontologies, Databases and Semantics (ODBASE)); GADA (Grid and High Performance); IS (Security in Information Systems); and DOA (Distributed Objects and Applications). Of particular note, DOA was one of the original OTM conferences and was **founded** by CI Tari, who is also **co-director** with Professor Robert Meersman of the DOA Institute, a non-profit organisation located in Brussels (Belgium).

CI Tari has been a **guest editor** of well-known journals such as *IEEE Transactions on Knowledge and Data Engineering*, *IEEE Transactions on Parallel and Distributed Systems*, *ACM Transactions on Database Systems*, *Wiley Concurrency*, and the *Australian Computer Journal*. He has also **edited** more than 20 proceedings including: *International Symposium of Distributed Objects and Applications (DOA) 2001/2002/2003/2004/2005/2006/2007/2008*, *Annual IFIP W.G. 11.3 Working Conference on Data and Application Security*, *Annual IFIP W.G. 2.6 Working Conference on Data Semantics*, *CoopIS (Cooperative Information Systems) 2002/2003/2004/2005/2006/2007/2008*, *ODBASE (Ontologies, Databases and Semantics) 2002/2003/2004/2005/2006/2007/2008* and *GADA (Grid computing, high-performance and Distributed Applications) 2004/2005/2006/2007/2008*.

CI Tari has taught and supervised many students, having graduated eight PhDs and more than fifteen Honours students in the last eight years, in addition to his current supervision of five full time PhD students. He has presented **lectures** at institutions in the USA (e.g. University of California at Irvine, Georgia Tech., University of Illinois); Europe (e.g. University of Tilburg, University of Twente, Technical University of Eindhoven, and University of Versailles, Swiss Federal Institute of Technology, Technical University of Barcelona); India (e.g. IIT Kanpur, IISC, NIT) and Australia (e.g. UNSW, Monash University and the UWA, QUT, Macquarie University).

4. LEADERSHIP IN RESEARCH AND INNOVATION

RMIT University

Discipline Head (Distributed Systems & Networking)

Details regarding this discipline, including achievements, are available at <http://www.cs.rmit.edu.au/eCDS>. This discipline originally started with a (very) small number of staff and postgraduate students. In 2005, the discipline has grown to become the largest within the school of Computer Science and Information Technology - comprising 11 staff, 5 postdocs, and more than 20 students. My leadership and management have fostered strong growth within this discipline, both in teaching (with the new degree in Games & Graphics), and in research (with the important increase in research output and grants).

- Provided leadership role in one of the School's major teaching and research area (Distributed Systems & Networking), developed and maintained links with industry partners, and fostered collaborative research within various research groups of my discipline and with various groups at RMIT (e.g. Engineering and Mathematics schools) and Australian research groups (e.g. Monash U., Deakin U, QUT, U. of Sydney).
- Provided leadership in enhancing the School's capacity to meet research income targets through research contracts, consultancy and competitive grants. Liaised with external people and organizations in government and other community sector to further the research activities of the Program and School.
- Lead school-based research teams in priority areas.
- Have taken a leadership role in assisting other staff to develop their research, teaching, management and administrative skills within my discipline.
- Undertook the role of discipline leader, involving responsibility for appraisal, work plans, and career plans for around eight academics, and creating teamwork within the unit. Also, in relation to teaching and research tasks, developed research and teaching strategies and guidance within the discipline.
- Took the leadership role in the initiation and development of program course materials.
- Participated fully to the development of School policy and served on School executive committee and School board committee.
- Performed administrative and management tasks related to the discipline within the School.

Active **member of Executive Committee** at School of Computer Science and IT (since 2000). I have helped formulate policies, and with the collaboration of senior staff, implemented these policies.

Active **member of the Discipline Head Committee** (since 2003).

Active **member of SET Research Committee** (since January 2005). I have been active in liaising between the school and the SET portfolio, pro-active in addressing various issues related to the research within the SET portfolio, and influenced the research vision within the SET portfolio.

Research coordinator at the School of Computer Science and IT (for 1-2 years).

Outside of RMIT University

Key member and positions

- **Co-director of SCC Pty Ltd**, Melbourne, Australia.
- **Co-director of DOA** (non profit) organisation, Brussels, Belgium.
- **Chair of the DOA board**.
- **Senior member** of the Institute of Electrical and Electronics Engineers (IEEE).
- Member of the Association for Computing Machinery (ACM) for over eight years.
- **Active Member** of IFIP WG 2.6 (Web Semantic) and IFIP WG 11.3 (Security).

Consultant and Project leader with the German National bank (1995).

- Took a management and leadership role in setting up the processes required to achieve the objectives of the projects.
- Produced the agreed outcomes for the industry organization in the agreed timelines.
- Performed a leadership role in organising and structuring the short and long-term goals of the project.
- Set up appropriate monitoring processes to improve the outcomes of the projects (as well as the satisfaction of the industry client).
- Helped other members of the group producing appropriate results.
- Produced fortnight detailed progress reports to the company. These reports, each of which is at least twenty pages long, include both a detailed description of the produced outcomes and a detailed plan for further improvement and future work.

This project was performed for one of the Sparkassenorganization GmbH, one of Germany's largest German banks. Four experts in the area of security were involved, Professor Denis Longley, Dr Alison Anderson and Professor William J. Caelli and myself as the project leader. The project focused on the design and implementation of a methodology for detecting different threads within the bank network system. The group has successfully produced a (confidential) report, of more than 700 pages, that details all security procedures, as well as a complete operational system. At the end of the project I was invited by the director of IT-Security, Dr T. Krebs, to Bonn to finalize all the details of the project.

Project leader of the Reflective Research Group, QUT (1993-1995).

The project concerned the extension of distributed systems to include reflective mechanisms. Some of the people were involved in the project: David Edmond, Professor Mike Papazoglou, Jim Reye, Glenn Stewart, Sylvia Edwards, Alex Delis and Athman Bouguetaya. The research group produced several significant outcomes including papers in international conferences, graduating a PhD student (David Edmond) and collaboration with international and national research groups.

- Produced appropriate research output for the research group (both publication and supervision.)
- Fostered the teamwork within the research group.
- Took a leadership role in assisting other staff in developing their research skills.
- Provided training for students, enabling them to perform advanced research in the area of distributed objects.

Expert for the Brazilian government

Amongst several experts in Europe and USA, I was selected by the special commission of the Brazilian government to help the Northern Universities in establishing their Master/PhD degrees and performing research. I was invited for one month, and I worked with various members to set up new degrees, and helped to do advanced research.

Expert for the Algerian government (2000-2005).

This was a unique opportunity to contribute to the development of research environments in developing countries. With the collaboration of colleagues at University of Bejaia (Algeria), I have created new Master degree in Distributed Systems as well as a PhD program which is a unique initiative in Africa. I have helped the team at University of Bejaia to set the new curriculum and monitor the progress monthly. I also help the university invite experts from Europe to work with the various research groups and teach in various programs. These new programs are now supported by the European Union.

Expert (in Distributed Systems and Networking) **in the Accreditation Panel for Department of Education & Training**, Victoria. I played in a key role in making sure that the curriculum is equivalent to the university ones. Finalising the accreditation of the various panel members took several months. [Jenny Wang: 9637 2036 (phone)]

Assessor

- Hong Kong SAR Government. I have been twice requested by the Education Council of Hong Kong to assess various national grant applications (equivalent to the ARC Discovery applications).
- Australian Research Council (ARC). The ARC College of Experts nominated me as an “expert of international standing” to assess a number of Discovery Projects in both 2003 and 2005.

Chair of the DOA Institute Board (Since January 2004)

This board involves experts in the areas of distributed systems, cooperative systems and semantic web.

Active members include: Will van der Aalst, Chris Bussler, Tiziana Catarci, Bernd Kramer, Denis McLeod, Robert Meersman, Douglas Schmit, Maarten van Steen, Zahir Tari (chair), Steve Vinoski and Avigdor Gal.

With the collaboration of Professor Robert Meersman

- **I created the DOA international conference** (Distributed Objects and Applications). DOA is now one of the well-known conferences in the area of middleware. Several experts in the area have been Program Committee Chairs.
- **I created the concept OTM** (OnTheMove). This enables experts and practitioners from various areas to meet, discuss and exchange ideas. We addressed the limitations of the international events, which address issues in a narrow way. OTM has become a very successful story – OTM Federated Conferences runs three major conferences (namely CoopIS, DOA and ODBASE) and OTM Federated Workshops runs around ten successful workshops. For more details, see the RMIT hosted web site of OTM: www.cs.rmit.edu.au/fedconf.

Program Committee Chair

I have also acted as a Program Co-Chair of several international conferences (see below). The **role** of the Program Co-chair includes (1) providing leadership in setting the direction of the event, of course from a technical perspective. (2) Coordinating the different activities (e.g. production of call for papers, assigning papers to reviewers, reviewing, finalisation of the technical program.) (3) Coordinating the efforts of different experts (i.e. program committee members) to produce appropriate results for the event. (4) Resolution of conflicts related to the technical parts of the events.

- WSMAI (Web Services: Modelling, Architecture and Infrastructure) 2003.
- DOA (Distributed Objects and Applications) 1999.
- DOA (Distributed Objects and Applications) 2000.
- IFIP Working Conference DBSec (Database Security) 2000.
- IFIP Working Conference DS (Database Semantics) 1999.
- MDDS (Mobility in Databases and Distributed Systems) 1998.

General Chair

I have acted as a General Co-chair of major international conferences (see page 32 of CV). The General Co-chair's **role consists** of (1) managing and planning all the activities related to the events, including technical and organisational. An average of 400 people, from academia and (major IT) industries, participate to these events. (2) Managing and working collaboratively with the different chairs of the events (i.e. Program Co-chairs, Tutorial chair, Organization chair, and Publicity chair) to produce appropriate outcomes (i.e. good technical program, good reputation of the conferences, etc.). (3) Management of the budget of the events. (4) Provide leadership in designing and determining the future direction of conferences. (5) Attracting sponsors to support the events. (6) Liaising with the various organizations that own the conferences (e.g. IFCIS, DOA Institute, IFIP Working Groups.) (7) Liaising with the publisher for the production of the proceedings (e.g. Springer, IEEE, Kluwer). (8) Interacting with and selecting worldwide experts to act as keynote speakers for the events. (9) Resolving conflicts, which **often** arise from the diversity of activities as well as people background and interests.

- 2008-2008 OTM (On The Move). See <http://www.cs.rmit.edu.au/fedconf/>
 - **General Co-Chair of “OTM Federated Conferences,”** involving 5 major international conferences: DOA (Infrastructure), CoopIS (Cooperation), ODBASE (Semantics), GADA (Grid), IS (Security).
 - **General Co-Chair of “OTM Federated Workshops,”** involving a series of 12 international workshops (organized by experts in various IT areas).