

## 著作目錄 (Selected Publications)

### I. Journal Publications

1. Deron Liang, and Rong-Hong Jan, "Reliability Analysis of a Simple Replicated And-Fork/And-Join Graph," *Operations Research Letters*, 16 (1994), pp. 51-59. (SCI)
2. Yen-Wen Lin, Shyan-Ming Yuan and Deron Liang, "The Design and Implementation of Moony: a Fault Tolerant Distributed Shared Memory System," *International Journal of Computer Systems Science and Engineering*, Vol. 10, No.2, pp. 111-119, April, 1995. (SCI)
3. Deron Liang and Satish K. Tripathi, "Performance Analysis of Long-Lived Transaction Processing Systems with Rollbacks and Aborts," *IEEE Trans. Knowledge and Data Engineering*, Vol. 8, No. 5, pp. 802-815, Oct., 1996. (SCI)
4. Deron Liang, Rong-Hong Jan and Satish K. Tripathi, "Reliability Analysis of Replicated And-Or Graphs," *Networks* 29: 195-203, 1997. (SCI)
5. Jan-Ming Ho, Deron Liang and Kuo-Hui Tsai, "On Multicast Routing in Clos Networks," *Journal of Information Science and Engineering*, Vol. 13, No. 3, pp. 417-429, 1997. (SCI)
6. E. Chung, Y. Huang, S. Yajnik, Deron Liang, C. Shih, C.-Y. Wang, and Y.-M. Wang, "DCOM and CORBA Side by Side, Step by Step, and Layer by Layer", *C++ Report*, Vol. 10, No. 1, pp. 18-30, Jan. 1998.
7. Deron Liang, S.-C. Chou and S.-M. Yuan, "A Fault-Tolerant Object Service in OMG's Object Management Architecture", *Information and Software Technology*, vol. 39, pp. 965-973, 1998. (SCI)
8. Deron Liang, Cheng-Liang Fang and S.-M. Yuan, "A Fault-Tolerant Object Service on CORBA," *Journal of Systems and Software*, Vol. 48, pp.197-211, 1999. (SCI)
9. Deron Liang and Satish K. Tripathi, "Performance Prediction on Parallel Computers with Precedence Constraints", *IEEE Trans. Parallel and Distributed*

- Systems*, vol. 11, no. 5, pp. 491-508, May, 2000. (SCI)
10. Winston Lo, Yue-Shan Chang, Shyan-Ming Yuan and Deron Liang, "The Design and Implementation of a Multi-threaded CORBA Object Request Broker", *Journal of Information Science and Engineering*, vol. 16, pp. 365-379, 2000. (SCI)
  11. Fengyi Lin, Deron Liang, Soushan Wu and Ray M. Yang, "An Integrated Auditing Architecture for Internet and Information System Design under a CORBA Environment", *Review of Accounting Information Systems*, vol. 4, no. 1, pp. 69-86, 2000.
  12. Deron Liang, Fengyi Lin and Soushan Wu, "Auditing EDP Systems Electronically with Support of Emerging Information Technologies", *International Journal of Accounting Information Systems* (American Accounting Association), vol. 2, pp. 130-147, 2001
  13. J. E. Jane, Y.-S. Lin, M.-B. Lin and Deron Liang, "Concentration, Load Balancing, Multicasting and Partial Permutation Routing on Hypercube Parallel Computers", *Journal of Information Science and Engineering*, vol. 18, pp. 693-712, 2002. (SCI)
  14. D. Liang, P. Chung, Y. Huang, C. Kintala, W.-J. Lee, T. K. Tsai, and C.-Y. Wang, "NT-SwiFT: Software Implemented Fault Tolerance on Windows NT", *Journal of Systems and Software*, vol. 71, Issues 1-2, pp. 127-141, April 2004. (SCI)
  15. John Fang, Deron Liang and C. Chen, "A nested invocation suppression framework for active replication fault-tolerant CORBA", *IEICE Trans. Information and Systems*, vol. E87-D, no. 8, Aug., pp. 43-50, 2004. (SCI)
  16. Fang, C.L., Liang, D., Chen, C., and Lin, P., "A Preliminary Study of Suppressing Redundant Nested Invocations from a Web Service with Active Replication", *International Journal of Web Service Research*, vol.1, no. 4, pp. 51-63, 2004. (SCI)
  17. Fang, C.L., Liang, D., Lin, F., and Lin, H., "Fault Tolerant Web Services", *Journal of Systems and Architecture*, vol.53, no. 1, pp. 21-38, 2007. (SCI)
  18. Fengyi Lin, Deron Liang, and Wing-Sang Chu, "The Role of Non-financial Features Related to Corporate Governance in Business Crisis Prediction", *Journal of Marine Science and Technology*, vol. 18, no. 4, pp. 504-513, 2010. (SCI)

19. Fengyi Lin, Seedy S. Fofanah, and Deron Liang, "Assessing Citizen Adoption of e-Government Initiatives in Gambia: A Validation of Technology Acceptance Model in Information Systems Success", to appear in *Government Information Quarterly*. (SCI)

## II. Referred Conference Papers

20. Deron Liang, Yiheng Shi, Daniel Mosse and A. K. Agrawala, "Designing Fault-Tolerant Applications in Maruti," in *Proc. 3rd International Symposium on Software Reliability Engineering (ISSRE)*, pp. 264-273, Research Triangle Park, NC, Oct. 1992.

21. Deron Liang and A.K. Agrawala, "Analyzing the Reliability of Real-Time Application," in *Proc. of IASTED International Conference on Reliability, Quality Control, and Risk Assessment*, pp. 66-69, Washington, DC, Nov., 1992.

22. Deron Liang and Satish K. Tripathi, "Performance Analysis of Long-Lived Transaction Processing Systems with Rollbacks and Aborts," in *Proc. of 21st International Conference on Parallel Processing (ICPP'92)*, pp. 234-241, Chicago, IL, August 1992.

23. Deron Liang and Satish K. Tripathi, "On Time-Space Decomposition to the Prediction on Parallel Computers", in *Proc. of 8th International Parallel Processing Symposium (IPPS'94)*, pp. 625-629, Cancun, Mexico, April, 1994.

24. Yue-Shan Chang, Yu-Ming Kao, Shyan-Ming Yuan and Deron Liang, "An Object Transaction Service based on CORBA Architecture," in *Proc. of IFIP/IEEE Int'l Conf. on Distributed Platforms (ICDOP'96)*, Dresden, Germany, 1996.

25. Da-Chiang Chang and Deron Liang, "Performance Evaluation of Clos Networks under Bursty Traffic," in *Proc. of International Symposium on Parallel Architectures, Algorithms, and Networks (I-SPAN'96)*, pp. 361-364, June, Beijing, China, 1996.

26. Jan-Ming Ho, Deron Liang and Kuo-Hui Tsai, "Routing Multicast Streams in Clos Networks," in *Proc. of International Symposium on Parallel Architectures,*

- Algorithms, and Networks* (I-SPAN'96), pp. 394-400, June, Beijing, China, 1996.
27. Deron Liang, S.-C. Chou and S.-M. Yuan, "A Fault-Tolerant Object Service in OMG's Object Management Architecture", in *Proc. of the 1996 International Workshop on Dependability in Advanced Computing Paradigms* (DACP-96), pp.99-104, Ibaraki, Japan, June, 1996.
  28. Deron Liang and Chen-Liang Fang, "On Multicast Routing over Clos networks", in *Proc. of the Second Workshop on Real Time and Media Systems* (RAMS'96), pp. 169-175, Taipei, Taiwan, July, 1996.
  29. K.-J. Liang, Deron Liang, and S.-M. Yuan, "Nested Transaction Services and Concurrency Control Services on CORBA", in *Proc. of IFIP/IEEE International Conference on Open Distributed Processing* (ICODP'97), Toronto, Canada, May, 1997.
  30. Deron Liang and Chen-Liang Fang, "Issues of Routing Multicast Streams over Clos Networks", in *Proc. of European Conference of Parallel and Distributed Systems* (EURO-PDS'97), pp. 231-236, Barcelona, Spain, June, 1997.
  31. Deron Liang, Y.M. Kao, Shyan-Ming Yuan, and Winston Lo, "An Object Transaction Service in CORBA," in *Proc. of the 21st Annual International Computer and Application Conference* (COMPSAC'97), pp. 115-120, Washington, D.C., USA, Aug., 1997.
  32. Deron Liang, Cheng-Liang Fang and S.-M. Yuan, "A Fault-Tolerant Object Service on CORBA," in *Proc. of the 17<sup>th</sup> International Conference on Distributed Computer Systems* (ICDCS'97), pp. 393-400, Baltimore, USA, May, 1997.
  33. Y. Huang, P. Chung, C. Kintala, D. Liang, C.-Y. Wang, "NT-Swift: Software Implemented Fault Tolerance for Windows NT", in *Proc. 2nd USENIX Windows NT Symposium*, Seattle, pp. 47-52, Aug. 1998.
  34. P. Chung, Y. Huang, S. Yajnik, D. Liang, and J. Shih, "DOORS - Providing fault tolerance to CORBA objects", in *Proc. of Middleware'98*, Sept. 1998.
  35. D. Liang, P. Chung, Y. Huang, C. Kintala, and C.-Y. Wang, "NT-Swift: Software Implemented Fault Tolerance for Windows NT", in *Proceedings of 29th IEEE*

*Fault-Tolerant Computing Symposium (FTCS29)*, Madison, Wisconsin, pp. 220-223, 1999.

36. Fengyi Lin, Deron Liang and Soushan Wu, "Auditing EDP Systems Electronically with Support of Emerging Information Technologies", in *Proceedings of 7th American Accounting Association Symposium on Accounting Information Systems (AIS7)*, Phoenix, USA, 2000.
37. Gene Eu Jan, Ming-Bo Lin, Albert Chao and Deron Liang, "A Constant Queue Partial Permutation Algorithm for Cube-Connected Cycles Multi-computer Systems", in *Proceedings of International Conference on Parallel and Distributed Systems*, Iweta, Japan, pp. 35-40, July 2000.
38. John Fang, Deron Liang and C. Chen, "A nested invocation suppression framework for active replication fault-tolerant CORBA", in *Proceedings of 29<sup>th</sup> COMPSAC*, August 2002.
39. John Fang, Deron Liang, C. H. Chen, and Fengyi Lin, "A nested invocation suppression mechanism for active replication fault-tolerant CORBA", in *Proceedings of 9<sup>th</sup> Asia Pacific Software Engineering Conference (ASPEC2002)*, Gold Coast, Australia, pp. 117-128, December 2002.
40. P. Lin, John Fang, Deron Liang, and Fengyi Lin, "A nested invocation suppression mechanism for active replication fault-tolerant SOAP-based web service", in *Proceedings of 14<sup>th</sup> Workshop on Object Oriented Technology and Application*, Chung-Li, Taiwan, September 2003.
41. John Fang, Deron Liang, C. H. Chen, and Fengyi Lin, "Fault-tolerant web service", in *Proceedings of 10<sup>th</sup> Asia Pacific Software Engineering Conference (ASPEC2003)*, Chiangmai, Thailand, pp. 310-319, December 2003.
42. J. Lin, Deron Liang, and Fengyi Lin, "An interceptor framework for JMS", in *Proceedings of 15<sup>th</sup> Workshop on Object Oriented Technology and Application*, Tainan, Taiwan, September 2004.
43. John Fang, Deron Liang, and Fengyi Lin, "A Nested Invocation Suppression Mechanism for Active Replicated SOAP Systems", in *Proceedings of 11<sup>th</sup> Asia Pacific Software Engineering Conference (ASPEC2004)*, Busan, Korea, November

2004.

44. Fengyi Lin, Deron Liang, and S. Wu, "A Study on Interceptor in Supporting Continuous Monitoring", in *Proceedings of the 2006 Annual Meeting of American Accounting Association*, Washington DC, USA, August, 2006.
45. John Fang, Deron Liang, Fengyi Lin, and C. Lin, "A Portable Interceptor Mechanism on SOAP for Continuous Auditing", in *Proceedings of 13<sup>th</sup> Asia Pacific Software Engineering Conference (ASPEC2006)*, Bangalore, India, December 2006.
46. Fengyi Lin, Deron Liang and Shih-Jung Chiu, "The Study of a Financial Crisis Prediction Model based on XBRL", in *Proceedings of 13<sup>th</sup> Symposium on Software Engineering, Network, and Parallel Processing (SNPD2008)*, Phuget, Thailand, Aug., 2008.
47. Deron Liang and Wei Ming Sung, "The Database Design of Financial Statement Based on XBRL", to appear in the *Proceedings of 2009 Object-oriented Technology and Applications (OOTA 2009)*, Taichung, Taiwan.
48. C. Y. Chen, K. H. He, and Deron Liang, "On the global features for mouse dynamics classification", in *Proceedings of the National Computer Symposium (NCS 2009)*, pp.45-54, Taipei, Taiwan.
49. C.-C. Lin, Fengyi Lin, Deron Liang, "An Analysis of Using State of the Art Technologies to Implement Real-time Continuous Assurance", to appear in *IEEE 6th World Congress on Services (SERVICES 2010)*, July 5-10, 2010, Miami, Florida, USA.

### **III. Submitted Papers**

50. C.-C. Lin, C.-L. Fang, Deron Liang, "A Portable Interceptor Mechanism for SOAP Frameworks", submitted to *Computer Standards & Interfaces*.
51. Deron Liang, G.-H. Chang, and R.-H. Jan, "On Optimal Vertex Augmentation of And-Or Series-Parallel Graphs", submitted to *IEEE Trans. Reliability*.

### **IV. Technical Reports**

1. Deron Liang, Y.M. Kao and Shyan-Ming Yuan, "An Object Transaction Service in CORBA," Tech. Rep. TR-IIS-96-005, Institute of Information Science, Academia Sinica, Taiwan, R.O.C., 1996.
2. Deron Liang and Da-Wei Wang, "The Bounded Loss Rate (BLR) Problems in Multicast Networks Part I: Problem Formulation", Tech. Rep. TR-IIS-96-013, Institute of Information Science, Academia Sinica, Taiwan, R.O.C., 1996.
3. Deron Liang, C. Shih, C.-Y. Wang, E. Chung, Y. Huang, and S. Yajnik, "Architectural Comparison of CORBA and Java RMI", Tech. Rep. TR-IIS-98-013, Institute of Information Science, Academia Sinica, Taiwan, R.O.C., 1998.