

CURRICULUM VITAE

Wei-Ming Lin

Professor

**Department of Electrical and Computer Engineering
The University of Texas at San Antonio**

I. GENERAL INFORMATION

A. Personal Data:

- Married, two daughters
- U.S. Citizen

B. Education:

- Ph.D. in Electrical Engineering
University of Southern California
December, 1991
- M.S. in Electrical Engineering
University of Southern California
December, 1985
- B.S. in Electrical Engineering
National Taiwan University, Taiwan
June, 1982

C. Academic Appointments:

- **Associate Dean for Graduate Studies**, *Apr. 2006 – present*
College of Engineering,
The University of Texas at San Antonio
- **Assistant Dean for Graduate Studies**, *Sep. 2005 – Apr. 2006*
College of Engineering
The University of Texas at San Antonio
- **Professor**, *Sep. 2004 – present*
Department of Electrical and Computer Engineering
The University of Texas at San Antonio
- **Associate Professor**, *Sep. 1998 – Aug. 2004*
Department of Electrical Engineering
The University of Texas at San Antonio
- **Assistant Professor**, *Se. 1993 – Aug. 1998*
Division of Engineering
The University of Texas at San Antonio
- **Assistant Professor**, *Aug. 1991 – Aug. 1993*
Department of Electrical and Computer Engineering
Mississippi State University
- **Teaching Assistant / Research Assistant**, *Sep. 1986 – Aug. 1991*
Department of Electrical and Computer Engineering
University of Southern California
- **Instructor**, *Feb. 1983 – Sep. 1984*

School of Naval Engineering
Kaohsiung, Taiwan

D. Other Employment:

None

E. Consulting:

None

F. Certification and Licensure:

None

F.G. Honors and Awards:

- *Faculty Research Award* – UTSA, 1993-1994
- *Outstanding Teaching Award* Nominee – UTSA, 1995 (representing EE Department)
- *Best Paper Award* – 1995 International Phoenix Conference on Computers and Communications, Phoenix, 1995: “Load Balancing Technique for Parallel Search with Statistical Model” (with Bo Yang)
- *Best Paper Award* (runner-up) – Fifth International Conference on Intelligent Systems, Reno, NV. 1996: “Sorting-Based Rejection Techniques for Fast Random Number Generation” (with Enmin Song)
- *Outstanding Teaching Award* Nominee – UTSA, 1997 (representing EE Department)
- *Piper Professor* Nominee – UTSA, 1997 (representing Division of Engineering and College of Science and Engineering)
- *Faculty Research Award* – UTSA, 1999-2000
- *Outstanding Teaching Award* Nominee – UTSA, 2001 (representing EE Department)
- Special Recognition for Services and Contributions – numerous recognitions from IEEE, UTSA Registered Student Organizations and several other professional organizations
- *Faculty Research Award* – UTSA, 2004-2005
- *Best Paper Award* – The 3rd International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2006): Communications Technologies and Applications Session (with Christopher Martinez)

Formatted: Bullets and Numbering

II. TEACHING

A. Classroom/Laboratory: Level: Undergraduate (U), Graduate (G)

Computer Architecture (G)
Computer Arithmetic (G)
Parallel Processing (G)
Advanced Computer Architecture (G)
Digital Systems Design (U)
Logic Design (U)
Microprocessor System Design I (U)
Microcomputer Systems (U)

B. Instructional Development:

1. Courses Developed (Course number, title, date)

- EE 5123 Computer Architecture
- EE 5423 Computer Arithmetic
- EE 5423 Parallel and Distributed Computing
- EE 5423 Advanced Computer Architecture

C. Masters' Theses and Ph.D. Dissertations Directed

1. Masters

- "Performance Prediction Model for SPMD Massively Parallel Computing Systems", Zhenhong Lu (Master Project)
- "Performance Analysis of Parallel Divide-and-Conquer Programs with Statistical Model", Yang Bo (Master Thesis)
- "Load Balancing and Task Allocation for Parallel Computation", Wei Xie (Master Thesis)
- "Design and Development of Cost Efficient Branch Prediction Hardwares", Ding Wei (Master Thesis)
- "Intelligent Traffic Control in Wormhole Routed Network", Chunhui Zhao (Master Thesis)
- "Task Scheduling in Multiprocessor Environment", Qiuyan Gu (Master Thesis)
- "Job Scheduling and Processor Allocation on Mesh-Connected Parallel Computers", Xiaomei Zhu (Master Thesis)
- "Efficient Job Scheduling for Mesh-Connected Multicomputers with Feed-Back Control", Qing Wan (Master Thesis)
- "Efficient Branch Prediction Techniques for High-Performance CPUs", An-Yi Yang (Master Thesis)
- "Advanced Deadlock Recovery And Injection Control Schemes for Wormhole Routed Networks", Chi-Mo Dai (Master Thesis)
- "Direct Sequence Spread Spectrum Communication Using an Integrated CPS Receiver", Jennifer Alvarez (Master Thesis)
- "Advanced Congestion-Relieving and Injection Control Schemes for Wormhole Routed Networks", Yumei Tang (Master Thesis)
- "Improving Dynamic Branch Prediction", Ramu Madhavaram (Master Thesis)
- "Task Scheduling Algorithm with Duplication for Distributed Computing", Srikar Reddy Pasham (Master Thesis)
- "Advanced Hybrid Branch Predictors For High-Performance CPUs", Venkata Subba Reddy Yerasi (Master Thesis)
- "Optimal XOR Hashing For Non-uniform Distribution", Chris Martinez (Master Thesis)
- "Cost-Performance Effective Hybrid Branch Predictor", Huy Dang (Master Thesis)
- Two M.S. projects

2. Ph.D. Dissertation

- "Autonomous Performance Optimizing Control Methodology (APOCoM) for Resource-Sharing Systems", Hsiu-Jy Ho

Update: 12/1/2008

- “Host Based Intrusion Detector: Component of Distributed Intrusion Detection Systems (DIDS) Architecture”, Ashok Tummala (de facto Advising Professor: Parimal Patel)
- “Advanced Hashing Techniques for Non-Uniformly Distributed Functions”, Chris Martinez

D. Membership on Graduate Committees

1. Masters

(Over 30 students)

2. Ph.D. Dissertation

- Chirag Parikh
- Dhireesha Kudithipudi

E. Postdoctoral/Research Fellows Supervised

- Yongsheng Song (1996)
- Enmin Song (1995)

III. RESEARCH

A. Bibliography:

1. Books/Book Chapters

1a. Books

1b. Book Chapters

1. **Wei-Ming Lin** and V. K. Prasanna, “Parallel Algorithms and Architectures for Consistent Labeling”, in *Parallel Processing for Artificial Intelligence*, ed. L. Kanal, V. Prasanna, H. Kitano and C. Suttner, pp. 335-362, 1993 Elsevier Science Publishers B. V.
2. **Wei-Ming Lin** and Hsiu-Jy Ho, “A Bypass-Sensitive Blocking-Preventing Scheduling Technique for Mesh-Connected Multicomputers”, *Lecture Notes in Computer Science*, Springer Berlin / Heidelberg, Vol. 2858, 2003, pp. 352-359.

4.

Formatted: Bullets and Numbering

2. Journal Papers (refereed full length)

2a. Published or In Press

1. **Wei-Ming Lin** and V. K. Prasanna Kumar, “A note on the Linear Transformation Method for Systolic Array Design”, *IEEE Transactions on Computers*, Vol. 39, No. 3, pp. 393-399, March 1990.
2. **Wei-Ming Lin** and V. K. Prasanna Kumar, “Efficient Histogramming on Hypercube SIMD Machines”, *Computer Vision, Graphics and Image Processing*, Vol. 49, pp.104-120, 1990.
3. **Wei-Ming Lin**, V. K. Prasanna Kumar and K. Wojtek Przytula, “Algorithmic Mapping of Neural Network Models onto Parallel SIMD Machines”, *IEEE Transactions on Computers*, Vol. 40, No. 12, pp. 1390-1401, December 1991.

Update: 12/1/2008

4. K. Wojtek Przytula, V. K. Prasanna Kumar and **Wei-Ming Lin**, "Parallel Implementation of Neural Networks", *Journal of VLSI Signal Processing*, pp. 111-123, May 1992.
5. **Wei-Ming Lin** and Bo Yang, "Probabilistic Performance Analysis for Parallel Search Techniques", *International Journal of Parallel Programming*, Vol. 23, No. 2, pp.161-189, 1995.
6. **Wei-Ming Lin** and Mehdi Arabshahi, "Worm-Hole Routing with Back-Route Capability", *Journal of Computing and Information*, Vol. 1, No. 2, pp.258-269, 1995.
7. **Wei-Ming Lin** and Enmin Song, "Fast Random Number Generating Algorithms for Predetermined Probability Distribution Functions", *Journal of Computing and Information*, Vol. 2, No. 1, pp. 90-113, 1996.
8. **Wei-Ming Lin**, Mehdi Arabshahi and Qingbo Cheng, "Worm-Hole Routing with Header-Regenerating and Back-Route Capability", *Journal of Computing and Information*, Vol. 2, No. 1, pp. 382-393, 1996.
9. **Wei-Ming Lin** and Qiuyan Gu, "Task Scheduling on Bus-based Networks of Workstations", *Parallel and Distributed Computing Practice (PDCP) Journal – Special Issue: Cluster Computing*, Vol. 2, No. 2, pp. 175-184, June 1999.
10. **Wei-Ming Lin** and Xiaomei Zhu, "Allocation Time-Based Processor Allocation Scheme for 2D Mesh Architecture", *Journal of Information Science and Engineering*, Vol. 16, No. 2, March 2000, pp.301-311.
11. **Wei-Ming Lin** and Wei Xie, "Load Skewing Task Assignment to Minimize Communication Conflicts on Network of Workstations", *Parallel Computing*, 26 (2000) pp. 179-197.
12. **Wei-Ming Lin** and Yongsheng Song, "Loop Scheduling for Heterogeneous Computing Environment Based on Performance Prediction", *Parallel and Distributed Computing Practices (PDCP) Journal*, No. 5, Vol. 2, 2002, pp. 219-231.
13. **Wei-Ming Lin** and An-Yi Yang, "Effective Branch Prediction through Caching of Aliasing Branches", *Journal of Information Science and Engineering*, Vol. 20, No. 4, 2004, pp. 557-574.
14. **Wei-Ming Lin**, Ramu Madhavaram and An-Yi Yang, "Improving Branch Prediction Performance with A Generalized Design for Dynamic Branch Predictors", *Informatica – an International Journal on Computing and Informatics*, Volume 29, Number 2, 2005, pp. 199-207.
15. Hsiu-Jy Ho and **Wei-Ming Lin**, "An Autonomous Control Methodology for Real-time Traffic Injection Control", *Scientific Journals International (SJI): Journal of Engineering, Computing and Architecture*, Vol. 1, Issue 1, 2006.
16. **Wei-Ming Lin** and Qiuyan Gu, "An Efficient Clustering-Based Task Scheduling Algorithm for Parallel Programs with Task Duplication", *Journal of Information Science and Engineering*, March 2007, Vol. 23. No. 2, pp. 589-604.
17. Christopher Martinez and **Wei-Ming Lin**, "An Ad Hoc Adaptive Hashing Technique for Non-Uniformly Distributed IP Address Lookup in Computer Networks", *Journal of Systemics, Cybernetics and Informatics*, Vol. 5, Number 1, 2007.
18. Christopher Martinez, **Wei-Ming Lin** and Parimal Patel, "Optimal XOR Hashing for Non-Uniformly Distributed Address Lookup in Computer Networks", *Journal of Network and Computer Applications* 30 (2007) pp. 1397-1427.
19. **Wei-Ming Lin**, "Performance Modeling and Analysis of Correlated Parallel Computations," *Parallel Computing*, Volume 34, Issue 9, September 2008, Pages 521-538.
20. Hsiu-Jy Ho and **Wei-Ming Lin**, "Task Scheduling for Multiprocessor Systems with Autonomous Performance-Optimizing Control", accepted to appear in *Journal of Information Science and Engineering*.

Update: 12/1/2008

21. Christopher Martinez, Devang Pandya and **Wei-Ming Lin**, “On Designing Fast Non-Uniformly Distributed IP Address Lookup Hashing Algorithms,” under second review for *IEEE/ACM Transactions on Networking* (major revision).

~~81. Diffusion in musculoskeletal tissue engineering scaffolds: Porosity, permeability, architecture, and mixing. *Tissue Engineering*. Submitted.~~

~~83. Bozarth, G.R.; Hutchison, H.; Li, X.; Wang, X.D.; Williams, R.P.; Agrawal, C.M.: Mechanical properties and collagen analysis of allograft treated with sequential dose gamma irradiation. Submitted.~~

Formatted: Bullets and Numbering

3. Conference Papers

3a. Published or Accepted

1. **Wei-Ming Lin** and V. K. Prasanna Kumar, “Parallel Architectures for Discrete Relaxation Algorithms”, *Workshop on Parallel Algorithms for Machine Intelligence and Pattern Recognition, International Joint Conference on Artificial Intelligence*, 1989.
2. **Wei-Ming Lin**, “Implementation of Neural Networks on Fixed Size Mesh Connected Array Processors”, *Fourth Annual Parallel Processing Symposium*, Los Angeles, CA, April 1990.
3. K. Wojtek Przytula, **Wei-Ming Lin** and V. K. Prasanna Kumar, “Partitioned Implementation of Neural Networks on Mesh Connected Array Processors”, *1990 IEEE Workshop on VLSI Signal Processing*.
4. **Wei-Ming Lin** and V. K. Prasanna Kumar, “Parallel Algorithms and Architectures for Discrete Relaxation Technique”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 1991.
5. **Wei-Ming Lin** K. Wojtek Przytula and V. K. Prasanna Kumar, “Efficient Implementation of Neural Networks on Fixed Size Mesh Connected Array Processors”, *International Conference on Image Analysis and Processing*, 1991.
6. **Wei-Ming Lin** and V. K. Prasanna Kumar, “Parallel Implementation of Discrete Relaxation Technique on Fixed Size Processor Arrays”, *International Conference on Applications-Specific Array Processors*, 1991.
7. Ashfaq Khokhar, **Wei-Ming Lin** and Viktor K. Prasanna, “Stereo and Image Matching on Fixed Size Mesh Arrays”, *IEEE Workshop on Computer Architectures and Machine Perception*, 1991.
8. K. Wojtek Przytula, Viktor K. Prasanna and **Wei-Ming Lin**, “NETMAP - Software Tool for Mapping Neural Networks onto Parallel Computers”, *IEEE Workshop on Neural Networks for Signal Processing*, 1992.
9. Ashfaq Khokhar and **Wei-Ming Lin**, “Stereo and Image Matching on Fixed Size Linear Arrays”, *International Parallel Processing Symposium*, Newport Beach, CA, Apr. 1993.
10. **Wei-Ming Lin**, “An Optimal and Scalable Parallel Preprocessing Technique in Pruning Search Space”, *Ninth International Conference on System Engineering*, Las Vegas, July 1993.
11. **Wei-Ming Lin** and Z. Lu, “Parallel Implementations of a Scalable Consistent Labeling Technique on Distributed Memory Multi-Processor Systems”, *International Conference on Parallel Processing*, Chicago, IL, Aug. 1993, pp.227-230
12. **Wei-Ming Lin**, “Parallel Tree Search Techniques for Constraint Satisfaction Problems”, *International Conference on Parallel Computing (ParCo '93)*, France, September 1993.

Update: 12/1/2008

13. **Wei-Ming Lin** and Zhengrong Yun, "Performance Analysis of Divide-and-Conquer Parallel Search Techniques", *International Conference on Parallel and Distributed Systems*, Taipei, Taiwan, Dec. 1993.
14. **Wei-Ming Lin** and Bo Yang, "Expected Performance Analysis of A Generic Parallel Search Technique", *International Phoenix Conference on Computers and Communications*, 1994.
15. **Wei-Ming Lin** and Bo Yang, "Load Balancing Technique for Parallel Search with Statistical Model", *International Phoenix Conference on Computers and Communications*, Phoenix, AZ, Mar. 1995.
16. **Wei-Ming Lin** and Zhenhong Lu, "Performance Prediction Model for SPMD Massively Parallel Computing Systems", *International Phoenix Conference on Computers and Communications*, Phoenix, AZ, Mar. 1995.
17. **Wei-Ming Lin** and Mehdi Arabshahi, "Worm-Hole Routing with Back-Route Capability", *7th International Conference on Computing and Information*, Waterloo, Canada, July 1995.
18. **Wei-Ming Lin** and Bo Yang, "Performance Modeling and Analysis of Correlated Parallel Computations", *8th International Conference on Parallel and Distributed Computing Systems*, Orlando, FL, Sept. 1995.
19. **Wei-Ming Lin** and Bo Yang, "Fast Parallel Tree Search with Static Load-Balancing Forward Checking Technique", *8th International Conference on Parallel and Distributed Computing Systems*, Orlando, FL, Sept. 1995.
20. Enmin Song and **Wei-Ming Lin**, "Performance Analysis of a Fast Decision Making Algorithm for Validity of Disjunctive Normal Form", *1996 ISCA International Conference on Computers and Their Applications*, San Francisco, California, March 1996.
21. **Wei-Ming Lin** and Enmin Song, "Fast Random Number Generating Algorithms for Predetermined Probability Density Functions", *8th International Conference on Computing and Information*, Waterloo Ontario, Canada, June 1996.
22. **Wei-Ming Lin**, Mehdi Arabshahi, and Qingbo Cheng, "Worm-Hole Routing with Header-Regenerating and Back-Route Capability," *8th International Conference on Computing and Information*, Waterloo Ontario, Canada, June 1996.
23. Enmin Song and **Wei-Ming Lin**, "Sorting-Based Rejection Techniques for Fast Random Number Generation", *Fifth International Conference on Intelligent Systems*, Reno, Nevada, June 1996.
24. Hong Liu, **Wei-Ming Lin** and Yongsheng Song, "An Efficient Processor Partitioning and Thread Mapping Strategy for Mesh-Connected Multiprocessor Systems", *Twelfth ACM Symposium on Applied Computing (SAC'97)*, pp.403-412, San Jose, California, Feb. 1997.
25. Yongsheng Song and **Wei-Ming Lin**, "Performance Prediction Based Loop Scheduling for Heterogeneous Computing Environment", *Twelfth ACM Symposium on Applied Computing (SAC'97)*, pp.413-421, San Jose, California, Feb. 1997.
26. **Wei-Ming Lin**, Wei Xie and Bo Yang, "Performance Analysis for Parallel Solutions to Generic Search Problems", *Twelfth ACM Symposium on Applied Computing (SAC'97)*, pp.422-430, San Jose, California, Feb. 1997.
27. Wei Xie and **Wei-Ming Lin**, "Communication Conflict Avoidance on Bus-Based Networks of Workstations with Load-Skewing Task Assignment", *10th International Conference on Parallel and Distributed Computing Systems (PDCS'97)*, New Orleans, LA, Oct. 1997.
28. **Wei-Ming Lin**, "Minimizing Communication Conflicts with Load-Skewing Task Assignment Techniques on Network of Workstations", *1997 International Symposium*

Update: 12/1/2008

- on Parallel Architectures, Algorithms and Networks (ISPA'97)*, Taipei, Taiwan, Dec. 1997.
29. **Wei-Ming Lin** and Ding Wei, "Cost-Efficient Branch Prediction Hardwares", 13th International Conference on Computers and Their Applications (CATA'98), Honolulu, Hawaii, March 1998.
 30. **Wei-Ming Lin**, Qiuyan Gu and Wei Xie, "DCP-NOW: A DCP-based Task Scheduling Technique for Networks of Workstations", *1998 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'98)*, Las Vegas, NV, July 1998.
 31. **Wei-Ming Lin** and Chunhui Zhao, "Wormhole Routing with Priority-based Channel Allocation", *1998 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'98)*, Las Vegas, NV, July 1998.
 32. **Wei-Ming Lin** and Chunhui Zhao, "Look-Ahead Traffic Distribution in Wormhole-Routed Networks", *Workshop on Advances in Parallel and Distributed Systems (APADS'98) in Symposium on Reliable Distributed Systems*, pp.318-323, West Lafayette, IN, Oct. 1998.
 33. **Wei-Ming Lin** and Xiaomei Zhu, "Allocation Time-Based Processor Allocation Scheme for 2D Mesh Architecture", *International Conference on Parallel and Distributed Systems*, Taiwan, Dec. 1998.
 34. **Wei-Ming Lin** and Chi-Mo Dai, "An Advanced Deadlock Recovery Scheme for Wormhole-Routed Networks", *IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2000)*, Las Vegas, NV, Nov. 2000.
 35. **Wei-Ming Lin** and Qing Wan, "Intelligent Job Scheduling for Mesh-Connected Multicomputers with Feedback Control", *IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2000)*, Las Vegas, NV, Nov. 2000.
 36. **Wei-Ming Lin** and R. Madhavaram, "Advanced Branch Prediction Based on a Generalized Predictor", *The 18th International Conference on Computers and Their Applications (CATA)*, pp.304-307, Honolulu, Hawaii, March, 2003.
 37. **Wei-Ming Lin** and An-Yi Yang, "Improving Branch Prediction Performance by Removing Temporally Close Aliases", *The 18th International Conference on Computers and Their Applications (CATA)*, pp.300-303, Honolulu, Hawaii, March, 2003.
 38. **Wei-Ming Lin** and Yumei Tang, "An Intelligent Congestion-Relieving Mechanism for Wormhole-Routed Networks", *The 16th International Conference on Parallel and Distributed Computing Systems (PDCS)*, Reno, Nevada, August, 2003.
 39. **Wei-Ming Lin** and Hsiu-Jy Ho, "A Bypass-Sensitive Blocking-Preventing Scheduling Technique for Mesh-Connected Multicomputers", *The 5th International Symposium on High Performance Computing (ISHPC-V)*, pp. 352-359, Tokyo, Japan, October 2003.
 40. Parimal Patel, Fred Hudson, **Wei-Ming Lin** and Haribabu Ramineni, "Hardware Network Intrusion Detection System", *International Conference on Advanced Technologies for Homeland Security (ICATHS)*, 2003.
 41. **Wei-Ming Lin**, Ramu Madhavaram, Parimal Patel and Fred Hudson, "A Real-Time Ad Hoc Packet Matching Technique for Hardware-Based Network Intrusion Detection Systems", *The ISCA 19th International Conference on Computers and Their Applications (CATA-04)*, Seattle, WA. March 2004.
 42. Hisu-Jy Ho and **Wei-Ming Lin**, "A Performance-Optimizing Scheduling Technique for Mesh-Connected Multicomputers Based on Real-Time Job Size Distribution", *IEEE Tenth International Conference on Parallel and Distributed Systems – QoS and Dynamic Systems Workshop*, Newport Beach, CA., July 2004.

Update: 12/1/2008

43. **Wei-Ming Lin**, Yumei Tang and Hisu-Jy Ho, "A Congestion-Relieving Mechanism for Wormhole-Routed Networks with Real-Time Injection Control", *IEEE Tenth International Conference on Parallel and Distributed Systems – QoS and Dynamic Systems Workshop*, Newport Beach, CA., July 2004.
44. Srikar Pasham and **Wei-Ming Lin**, "Task Scheduling Algorithm with Duplication for Distributed Computing", *17th International Conference on Computer Applications in Industry and Engineering*, Orlando, FL., Nov. 2004.
45. Hsiu-Jy Ho and **Wei-Ming Lin**, "Job Scheduling with Real-Time Optimal Control", *The ISCA 14th International Conference on Intelligent and Adaptive Systems and Software Engineering (IASSE-05)*, Toronto, Canada, July, 2005.
46. Srikar Pasham and **Wei-Ming Lin**, "Efficient Task Scheduling with Duplication for Bounded Number of Processors", *The IEEE 11th International Conference on Parallel and Distributed Systems (ICPADS-2005)*, Fukuoka, Japan, July, 2005.
47. Christopher Martinez, **Wei-Ming Lin** and Parimal Patel, "Optimal XOR Hashing for A Linearly Distributed Address Lookup in Computer Networks", *Symposium on Architectures for Networking and Communications Systems (sponsored by ACM and IEEE)*, Oct., 2005, Princeton, New Jersey.
48. Parimal Patel, Ashok Kumar Tummala, Hari Babu Ramineni and **Wei-Ming Lin**, "Improved Design and Implementation of Network Intrusion Detection System for Gigabit Network Traffic Using FPGA", *ISCA 18th International Conference on Computer Applications in Industry and Engineering*, November, 2005, Honolulu, Hawaii, USA
49. Venkata S. Yerasi and **Wei-Ming Lin**, "Advanced Hybrid Branch Predictors for High-Performance CPUs", *ISCA 21st International Conference on Computers and Their Applications (CATA-2006)*, March 2006, Seattle, Washington.
50. Christopher Martinez and **Wei-Ming Lin**, "An Ad Hoc Adaptive Hashing Technique for Non-Uniformly Distributed IP Address Lookup in Computer Networks", *3rd International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2006)*, July, 2006, Orlando, FL.
51. Christopher Martinez and **Wei-Ming Lin**, "Adaptive Hashing Technique for IP Address Lookup in Computer Networks", *14th IEEE International Conference on Networks (ICON 2006)*, September 2006, Singapore.
52. Devang Pandya, Chris Martinez, **Wei-Ming Lin** and Parimal Patel, "Advanced Hashing Techniques for Non-Uniformly Distributed IP Address Lookup", *Third IASTED International Conference on Communications and Computer Networks (CCN2006)*, October 2006, Lima, Peru.
53. Devang Pandya, Chris Martinez, **Wei-Ming Lin** and Parimal Patel, "The Design of Efficient Hashing Techniques for IP Address Lookup", *31st IEEE Annual Conference on Local Computer Networks (LCN 2006)*, November 2006, Tampa, Florida.
54. Parimal Patel, Chirag Parikh, and **Wei-Ming Lin**, "Logic Design Laboratory: An Early Introduction to Programmable Devices and Tools", *ASEE Gulf Southwest Annual 2007 Conference*, March 28-30, 2007, South Padre, Texas
55. Hsiu-Jy Ho and **Wei-Ming Lin**, "Autonomous Random Early Detection for TCP Congestion Control", *The Third International Conference on Systems and Networks Communications (ICSNC 2008)*, October 26-31, 2008, Sliema, Malta

B. Lectures, Seminars

1. Scientific Lectures, Seminars

- Hughes Research Lab, Malibu, April, 1991

- Engineering Research Center, Mississippi State University, May 1991
- Illinois Institute of Technology, Department of ECE, May 1991
- National Taiwan University, Department of EE, December 1993

2. Other Lectures, Seminars, Briefings, Short courses

C. Areas of Research Interest

Computer Architecture, Parallel and Distributed Computing, Computer Network Routing, Real-Time Performance Optimization Methodologies, Network Intrusion Detection

D. Research Support

1. National/International

Agency: National Science Foundation
Title: "MII: Infrastructure Improvement in Computer Engineering Education and Research: Computing, Networking and Security"
Peer Reviewed (Y/N): Y
Date (start-end): Jan. 2005 - Dec. 2005
Total amount: \$50,000
Role ([Principal Investigator](#)/Co-investigator): Co-PI

Agency: Office of Naval Research
Title: "Performance Modeling, Analysis, Prediction and Improvement of SPMD Parallel Computations"
Peer Reviewed (Y/N): Y
Date (start-end): June 1995 - May 1998
Total amount: \$244,400
Role ([Principal Investigator](#)/Co-investigator): PI

Agency: Office of Naval Research (Augmentation Awards for Science and Engineering Research Training)
Title: "Performance Analysis, Prediction and Enhancement for Generic Correlated Parallel Computations"
Peer Reviewed (Y/N): Y
Date (start-end): Sep. 1996 - Aug. 1999
Total amount: \$58,650
Role ([Principal Investigator](#)/Co-investigator): PI

Agency: Department of Defense/AFOSR (University Research Initiative Support Program)
Title: "Telecommunication Networks for Mobile & Distributed Communications/Computing"
Peer Reviewed (Y/N): Y
Date (start-end): Sep. 1996 - Aug. 2001
Total amount: \$2,000,000
Role ([Principal Investigator](#)/Co-investigator): Co-Investigator

2. State

Agency: Texas Higher Education Coordinating Board for Technology Workforce Development Program
Title: "Recruiting and Retaining Electrical Engineering Students Using Programmable Logic Devices"
Peer Reviewed (Y/N): Y
Date (start-end): Sep. 2004 - Aug. 2005
Total amount: \$69,000
Role ([Principal Investigator](#)/Co-investigator): Co-PI

3. Companies

Agency: AdviTech Inc.
Title: "Prototyping a Wearable Labyrinth System for Curing Motion Sickness"
Peer Reviewed (Y/N): N
Date (start-end): Jun. 2004 – Aug. 2006
Total amount: \$84,967
Role ([Principal Investigator](#)/Co-investigator): PI

4. Other including sub-contracts, internal UTSA funding through earmarks, institutional grants etc.

Agency: Center for Infrastructure Assurance and Security Research, Homeland Security
Title: "High-Speed Intrusion Detection" (Phase III)
Peer Reviewed (Y/N): Y
Date (start-end): Sep. 2005 – Aug. 2006
Total amount: \$175,000
Role ([Principal Investigator](#)/Co-investigator): Co-PI

Agency: UTSA Faculty Research Award
Title: "Autonomous Real-Time Traffic Injection Control (ARTIC) for Freeway System"
Peer Reviewed (Y/N): Y
Date (start-end): 2004-2005
Total amount: \$5,000
Role ([Principal Investigator](#)/Co-investigator): PI

Agency: Center for Infrastructure Assurance and Security Research, Homeland Security
Title: "High-Speed Intrusion Detection" (Phase II)
Peer Reviewed (Y/N): Y
Date (start-end): Jun. 2002 - Dec. 2003
Total amount: \$277,832
Role ([Principal Investigator](#)/Co-investigator): Co-PI

Agency: Center for Infrastructure Assurance and Security Research, Homeland Security
Title: "High-Speed Intrusion Detection"
Peer Reviewed (Y/N): Y
Date (start-end): Jan. 2004 - Dec. 2004
Total amount: \$225,222
Role ([Principal Investigator](#)/Co-investigator): Co-PI

Agency: UTSA Faculty Research Award
Title:
Peer Reviewed (Y/N): Y
Date (start-end): 1999-2000
Total amount: \$5,000
Role ([Principal Investigator](#)/Co-investigator): PI

Agency: UTSA Faculty Research Award
Title:
Peer Reviewed (Y/N): Y
Date (start-end): 1993-1994
Total amount: \$5,000
Role ([Principal Investigator](#)/Co-investigator): PI

Agency: MSU/NSF-Engineering Research Center
Title: "Interactive Parallel Program Performance Predictor for Computational Parallel Program Development"
Peer Reviewed (Y/N): N
Date (start-end): May 1992 - April 1993
Total amount: \$27,000
Role ([Principal Investigator](#)/Co-investigator): PI

IV. SERVICE

A. Professional Activities:

☐ *Current Professional and Scientific Organizations/Societies*

1991-present IEEE

Formatted: Bullets and Numbering

International Conference/Meeting/Symposium Organizer/Chairmanship

- Tutorial Chair of the 1993 International Parallel Processing Symposium
- Program Committee Member of the Ninth IASTED International Conference on Parallel and Distributed Computing Systems, 1997
- Program Committee Member of the Thirteenth International Conference on Computers and Their Applications, 1998
- Program Committee Member of the 17th International Conference on Computer Applications in Parallel and Distributed Computing Systems (PDCS-2004), San Francisco, CA, September, 2004
- Program Chair for the 17th International Conference on Computer Applications in Industry and Engineering (CAINE-2004), Orlando FL, November, 2004
- Program Committee Member of the 18th ISCA International Conference on Parallel and Distributed Computing Systems (PDCS-2005), Las Vegas, NV, 2005.
- Program Committee Member for the 18th International Conference on Computer Applications in Industry and Engineering (CAINE-2005), Honolulu, Hawaii, 2005

Update: 12/1/2008

- Program Committee member of The 8th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD2007), Qingdao, China, 2007
- Program Committee member of The 4th International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2007), Orlando, Florida, 2007.
- Program Committee member of The 2008 International Conference on Information Systems (ICIS 2008), Paris, France, 2008.
- Program Committee member of the First International Multi-Conference on Engineering and Technological Innovation (IMETI 2008)
- Program Committee member of the 7th IEEE/ACIS International Conference on Computer and Information Science, 2008.
- Program Committee member of the 8th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2009).
- Program Committee member of the International Program Committee for SNPD 2009 (10th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing)
- Program Committee member of the Fourth International Conference on Systems and Networks Communications ICSNC 2009 Porto, Portugal

B. Committees:

1. Department

- Department of EE Faculty Search Committee Chair (1999-2003)
- Department of EE Faculty Search Committee Member (1995-1998,2004-2005)
- Department of EE Graduate Advisor (1996-2005)
- Department of EE Award Committee (2005)
- Department of EE Faculty Review Advisory Committee Chair (2004-2005)
- College of Engineering Faculty Review Advisory Committee Chair (2004-2005)
- Department of ECE Faculty Special Hire Evaluation Sub-Committee Member (2005-2006)
- Department of ECE Space Committee Chair (2005-4/2006)
- Department of ECE Ph.D. Admission Committee Chair (2006-2007)
- Department of ECE Graduate Recruitment Committee Chair (2007)
- Department of ECE Computer Engineering Group Coordinator (2007-present)
- Department of ECE Faculty Review Advisory Committee member (2008)
- Department of ECE Computer Engineering Undergraduate Program Co-Planner
- Department of ECE ABET Program Outcome Committee Chair (2008-present)

2. College of Engineering

- Division of Engineering Faculty Advisory Committee Chair (1999-2000)
- Division of Engineering Faculty Review Advisory Committee Member (1999-2000)
- College of Sciences and Engineering Faculty Advisory Committee Member (1999-2000)
- Dean of College of Engineering Search Committee Member (2000-2001)

Update: 12/1/2008

- College of Engineering ABET Ad Hoc Committee (2001-2005)
- College of Engineering Faculty Review Advisory Committee Chair (2004-2005)
- College of Engineering Faculty Advisory Committee Chair (2007-present)
- College of Engineering Graduate Program Committee Chair (2007-present)

3. **University**

- University Faculty Development Leave Committee Member (2003-2004)
- University Council Member on International Programs (2002-2004)
- University Life Award Presenter (4/2006)
- University Handbook of Operation (HOP) Review and Revision Committee Member (2007-2008)
- University Responsible Conduct of Research Ad Hoc Working Group Member (2007-2008)
- University Strategic Planning Committee Member (2007-2008)

C. Administrative Responsibilities:

1. **Department**

2. **College**

- **Associate Dean for Graduate Studies**, *Apr. 2006 – present*
College of Engineering,
The University of Texas at San Antonio
- **Assistant Dean for Graduate Studies**, *Sep. 2005 – Apr. 2006*
College of Engineering
The University of Texas at San Antonio

3. **University**

4. **Staff Currently Supervised (not including students):**

- Liping Bien (COE Graduate Program Coordinator)