BILL LIN
Curriculum Vitae
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EDUCATION

- **Ph.D**, Electrical Engineering and Computer Sciences
  University of California, Berkeley, May 1991
- **Masters of Science**, Electrical Engineering and Computer Sciences
  University of California, Berkeley, May 1988
- **Bachelor of Science**, Electrical Engineering and Computer Sciences
  University of California, Berkeley, May 1985

PROFESSIONAL EXPERIENCE

1/1997 – present	**University of California, San Diego**
	Professor, Electrical and Computer Engineering
	Adjunct Professor, Computer Science and Engineering
2/1992 – 12/1996	**IMEC, Leuven, Belgium**
	Group Head, Systems Control and Communications Group

AREAS OF EXPERTISE

- All aspects of computer networking network security, and computer architecture problems, including the design of computer networks, data center architectures, wireless communications, heterogeneous multicore processors, and systems-on-chips.

PROFESSIONAL ACTIVITIES

- Served or serving as Editor on 3 ACM or IEEE journals, as General Chair on 4 ACM or IEEE conferences, on the Organizing or Steering Committees for 5 ACM or IEEE conferences, and on the Technical Program Committees of 44 ACM or IEEE conferences.

SELECTED PROFESSIONAL ACTIVITIES

- General Chair, ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS), 2010
- Chair of Steering Committee, ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS), 2012-2017
- Guest Editor, IEEE Transactions on Network and Service Management (TNSM), 2012-2013
- General Co-Chair, ACM SIGMETRICS, 2015
- Associate Editor, ACM Transactions on Design Automation and Electronics Systems (TODAES), 2010-2015
- Editorial Board, International Journal of Embedded Systems, 2003-present
- General Chair, ACM/IEEE Symposium on Networks-on-Chips (NOCS), 2009

PUBLICATIONS

- Published over 170 journal articles and conference papers in top-tier venues and publications.

SELECTED PUBLICATIONS

- Sen Yang, Bill Lin, Jun Xu, "Safe Randomized Load-Balanced Switching by Diffusing Extra Load," ACM SIGMETRICS International Conference on Measurement and Modeling of Computer Science, Irvine, CA, June 18-22, 2018.
- Sen Yang, Bill Lin, Paul Tune, Jun Xu, "A Simple Re-Sequencing Load-Balanced Switch based on Analytical Packet Reordering Bounds," IEEE Conference on Computer Communications (INFOCOM), Atlanta, GA, May 1-4, 2017.
- Chia-Wei Chang, Guanyao Huang, Bill Lin, Chen-Nee Chuah, "LEISURE: Load-Balanced Network-Wide Traffic Measurement and Monitor Placement," IEEE Transactions on Parallel and Distributed Systems, vol. 26, no. 4 (April 2015), pp. 1059-1070.
- Xiaodong Yu, Bill Lin, Michela Becchi, "Revisiting State Blow-Up: Automatically Building Augmented-FA While Preserving Functional Equivalence," IEEE Journal on Selected Areas in Communications, 32(10): 1822-1833 (2014).
- Hao Wang, Bill Lin, "Reservation-Based Packet Buffers with Deterministic Packet Departures," IEEE Transactions Parallel Distributed Systems, 25(5): 1297-1305 (2014).
- Weijun Ding, Jun (Jim) Xu, Jim Dai, Yang Song, Bill Lin, "Sprinklers: A Randomized Variable-Size Striping Approach to Reordering-Free Load-Balanced Switching," ACM CoNEXT 2014.
- Hao Wang, Haiquan (Chuck) Zhao, Bill Lin, and Jun (Jim) Xu, "Robust Pipelined Memory System with Worst Case Performance Guarantee," IEEE Transactions on Computers, October 2012.
- Guanyao Huang, Chia-Wei Chang, Chen-Nee Chuah and Bill Lin, "Measurement-Aware Monitor Placement and Routing: A Joint Optimization Approach for Network-Wide Measurements," IEEE Transactions on Network and Service Management, vol. 9, no. 1, March 2012, pp. 48-59.
- Hao Wang, Haiquan Zhao, Bill Lin, and Jun Xu, "DRAM-based statistics counter array architecture with performance guarantee." IEEE/ACM Transactions on Networking, vol. 20, no. 4 (2012): 1040-1053.
- Rohit Sunkam Ramanujam, Bill Lin, "Randomized Throughput-Optimal Oblivious Routing for Torus Networks," IEEE Transactions on Computers, IEEE Digital Library, publication date: November 29, 2011,
- Nan Hua, Bill Lin, Jun Xu, Haiquan Zhao, "BRICK: A Novel Exact Active Statistics Counter Architecture," IEEE/ACM Transactions on Networking, vol. 19, no. 3, June 2011, pp. 670-682.
- Chia-Wei Chang, Seungjoon Lee, Bill Lin, Jia Wang, "The Taming of the Shrew: Mitigating Low-Rate TCP Targeted Attack," IEEE Transactions on Network and Service Management, 7(1): 1-13 (2010).
- Bill Lin, Isaac Keslassy, "The Concurrent Matching Switch Architecture," IEEE/ACM Transactions on Networking, vol. 18, no. 4, August 2010, pp. 1330-1343.
- Bill Lin, Isaac Keslassy, "The Interleaved Matching Switch Architecture," IEEE Transactions on Communications, vol. 57, no. 12, December 2009.
- Jerry C. Chou, Bill Lin, Subhabrata Sen, Oliver Spatscheck, "Proactive Surge Protection: A Defense Mechanism for Bandwidth-Based Attacks," IEEE/ACM Transactions on Networking, 17(6): 1711-1723 (2009).
- Jerry Chou, Bill Lin, "Coarse Circuit Switching by Default, Re-Routing Over Circuits for Adaptation," Journal of Optical Networking, vol. 8, no. 1, pp. 33-50, January 2009.

PATENTS

- Mitigating Low-Rate Denial-of-Service Attacks in Packet-Switched Networks. United States Patent 8,443,444. Issued in May 14, 2013.
- Systems and Methods for Proactive Surge Protection. United States Patent 7,860,004. Issued in December 28, 2010.
- Method and Apparatus for Scan Block Caching. United States Patent 7,672,005. Issued in March 2, 2010.
- Design Environment and a Design Method for Hardware/Software Co-Design. United States Patent 5,870,588. Issued in February 9, 1999.
- System and Method for Generating a Hazard-Free Asynchronous Circuit. United States Patent 5,748,487. Issued in May 5, 1998.

EXPERT WITNESS HISTORY

I have served as an expert witness on 21 cases (most cases involved multiple patents in suit), of which I wrote expert reports or declarations for 14 cases, analyzed source code in 10 cases, was deposed 11 times, and testified at trial 2 times. The specific cases and services provided are as follows:

1. Vizio, Inc. v. LG Electronics, Inc. and LG Electronics USA Inc., Civil Action No. 09-cv-1481-BEL
   - Expert witness on behalf of Vizio, Inc.
   - Law firm: Jones Day.
   - Services provided: Provided expert report, analyzed source code.
   - Technologies: Digital TV.

2. Vizio Inc. v. LG Electronics, Inc. and LG Electronics USA Inc., In the Matter of CERTAIN FLAT PANEL DIGITAL TELEVISIONS AND COMPONENTS THEREOF, U.S. International Trade Commission Inv. No. 337-TA-733
   - Expert witness on behalf of Vizio, Inc.
   - Law firm: Jones Day.
   - Services provided: Provided expert report, analyzed source code.
   - Technologies: Digital TV.

3. Vizio Inc. v. Coby Electronics Corp., Curtis International Ltd., E&S International Enterprises, Inc., MStar Semiconductor, Inc., ON Corp US, Inc., Renesas Electronics Corporation, Japan, Renesas Electronics America, Inc., Sceptre, Inc., and Westinghouse Digital, LLC, In the Matter of CERTAIN DIGITAL TELEVISIONS AND COMPONENTS THEREOF, U.S. International Trade Commission Inv. No. 337-TA-789
   - Expert witness on behalf of Vizio, Inc.
   - Law firm: Jones Day.
   - Services provided: Provided expert reports, was deposed, analyzed source code.
   - Technologies: Digital TV.

4. Linex Technologies Inc. v. Hewlett-Packard Company, Apple Inc., Aruba Networks, Inc., Meru Networks, and Ruckus Wireless, In the Matter of CERTAIN WIRELESS COMMUNICATION DEVICES AND SYSTEMS, COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME, U.S. International Trade Commission Inv. No. 337-TA-775
   - Expert witness on behalf of Hewlett-Packard Company, Apple Inc., Aruba Networks, Inc., Meru Networks, and Ruckus Wireless
   - Law firms: Covington & Burling, K&L Gates, Morrison & Foerster, Lewis Roca & Rothgerber.
   - Services provided: Provided expert reports, was deposed, analyzed source code.
   - Technologies: WiFi networks.

5. MOSAID Technologies, Inc. v. Dell, Inc., Qualcomm Atheros, Inc., et al., Case No. 2:11-cv-00179-TJW
   - Expert witness on behalf of Qualcomm Atheros, Inc.
   - Law Firm: McDermott Will & Emory.
   - Services provided: Provided expert analysis.
   - Technologies: WiFi networks.

6. Hitachi Consumer Electronics Co. Ltd., et al. v. Top Victory Electronics (Taiwan) Co. Ltd., et al., Civil Action No. 2:10-cv-260-JRG.
   - Expert witness on behalf of Vizio, Inc.
   - Law Firm: Akin Gump Strauss Hauer & Feld
   - Services provided: Provided expert reports, analyzed source code.
   - Technologies: Digital TV.

7. United States International Trade Commission (USITC) Investigation Number: 337-TA-853 and Technology Properties Limited, LLC v. Kyocera Corporation and Kyocera Communications, Inc. in the Northern District of California, Case No. 3:12-cv-03860-JSC
   - Expert witness on behalf of Kyocera Corporation and Kyocera Communcations.
   - Law firm: Morrison & Foerster.
   - Services provided: Provided expert analysis.
   - Technologies: Cell phones, microprocessors.

8. Netgear, Inc. v. Ruckus Wireless, Inc., Case No. 1:10-cv-00999-SLR / D. Del.
   - Expert witness on behalf of Ruckus Wireless, Inc.
   - Law firms: Lewis Roca & Rothgerber, Orrick.
   - Services provided: Provided expert report, analyzed source code, was deposed, and testified at trial.
   - Technologies: WiFi networks.

9. Sonics, Inc. v. Arteris, Inc., Case No. 11 CV-05311 SBA, and Arteris S.A.S. v. Sonics, Inc., Case No. C 12-00434 (WHA)
   - Expert witness on behalf of Arteris, Inc. and Arteris S.A.S.
   - Law firm: DLA Piper.
   - Services provided: Retained as an expert.
   - Technologies: Systems-on-Chips (SoCs).

10. Linex Technologies Inc. v. Hewlett-Packard Company, Apple Inc., Aruba Networks, Inc., Meru Networks, and Ruckus Wireless, U.S. District Court, Northern District of California, C 13-00159 CW
    - Expert witness on behalf of Hewlett-Packard Company, Apple Inc., Aruba Networks, Inc., Meru Networks, and Ruckus Wireless
    - Law firms: Covington & Burling, Milbank, K&L Gates, Morrison & Foerster, Lewis Roca & Rothgerber.
    - Services provided: Provided expert reports, analyzed source code.
    - Technologies: WiFi networks.

11. Frontier Communications Corp. v. Google, C.A. No. 10-545 (D. Del)
    - Expert witness on behalf of Frontier Communications Corp.
    - Law firm: Steese, Evans & Frankel
    - Services provided: Provided expert analysis, wrote declarations, analyzed source code.
    - Technologies: Voice over IP.

12. U.S. Ethernet Innovations LLC v. Acer, Inc. et al., Case No. 10-cv-3724 (N.D. Cal.)
    - Expert witness on behalf of Qualcomm Atheros, Inc., Sigma Designs, Inc., and AT&T Services, Inc.
    - Law firms: Reed Smith LLP, Pillsbury Winthrop Shaw Pittman LLP, and Vinson & Elkins LLP.
    - Services provided: Provided expert reports, was deposed, analyzed source code.
    - Technologies: Intelligent network interfaces, data center networks.

13. Inter Partes Review of a U.S. Patent.
    - Expert witness on behalf of Netgear, Inc. and Belkin International, Inc.
    - Law firm: Reed Smith LLP.
    - Services provided: Provided declaration for IPR petition.
    - Technologies: Wireless networks.

14. Inter Partes Review of U.S. Patents.
    - Expert witness on behalf of Arista Networks.
    - Law firm: Fish & Richardson.
    - Services provided: Provided declarations for IPR petitions, deposed 3 times.
    - Technologies: Network routers, data center networks.

15. Invalidity Expert Witness.
    - Expert witness on behalf of Intel Corp.
    - Law firm: Wilmer Cutler Pickering Hale and Dorr LLP.
    - Services provided: Provided expert analysis.
    - Technologies: WiFi networks, bluetooth networks.

16. Parthenon Unified Memory Architecture LLC v. HTC Corporation et al., Case No. 2:14-CV-690-JRG-RSP (E. D. Texas).
    - Expert witness on behalf of HTC Corporation and HTC America, Inc.
    - Law firm: Sidley Austin LLP.
    - Services provided: Retained as an expert.
    - Technologies: Memory architectures.

17. System Architecture Information Technology dba SAI Technology, Inc. v. Qualcomm Inc.
    - Expert witness on behalf of Qualcomm Inc.
    - Law firm: McDermott Will & Emory.
    - Services provided: Retained as an expert, analyzed source code, was deposed, and testified at trial.
    - Technologies: WiFi networks.

18. Invalidity Expert Witness.
    - Expert witness on behalf of Sandvine Corp.
    - Law firm: Erise IP.
    - Services provided: Provided declarations.
    - Technologies: Network monitoring and measurements.

19. Inter Partes Review of U.S. Patents.
    - Expert witness on behalf of Intel Corp., Cavium Inc., and Dell Inc.
    - Law firms: Weil, Gotshal & Manges LLP, Duane Morris LLP, Alston & Bird LLP.
    - Services provided: Provided declarations for IPR petitions, deposed 2 times.
    - Technologies: Intelligent network interfaces, data center networks.

20. Expert Witness.
    - Law firm: Covington & Burling.
    - Services provided: Retained as an expert.
    - Technologies: WiFi networks.

21. Qualcomm Inc. v. Apple Inc., Inv. No. 337-TA-1065 (ITC), and Civ. Action No. 3:17-cv-01375-JAH-MDD (S.D. Cal.)
    - Expert witness on behalf of Apple Inc. and Intel Corp.
    - Law firm: Wilmer Cutler Pickering Hale and Dorr LLP.
    - Services provided: Provided expert reports/declarations, was deposed.
    - Technologies: Wireless systems, computer architecture.