BILL LIN

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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 Research Laboratory, Leuven, Belgium

Group Head, Systems Control and Communications Group

AREAS OF EXPERTISE

All aspects of communications networks and computer architecture problems, including the design of
data networks, high-performance switches and routers, many-core processors and systems-on-chip,
and ASIC chip designs.

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 Co-Chair, ACM SIGMETRICS, 2015
- Guest Editor, IEEE Transactions on Network and Service Management (TNSM), 2012-2013
- General Chair, ACM/IEEE International Workshop on Quality-of-Service (IWQoS), 2011
- General Chair, ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS), 2010
- General Chair, ACM/IEEE Symposium on Networks-on-Chips (NOCS), 2009

PUBLICATIONS

Published over 160 journal articles and conference papers in top-tier venues and publications.



SELECTED PUBLICATIONS

- W. Ding, J. Xu, J. Dai, Y. Song, B. Lin, "Sprinklers: A Randomized Variable-Size Striping Approach
 to Reordering-Free Load-Balanced Switching," ACM International Conference on Emerging
 Networking Experiments and Technologies (CoNEXT), December 2-5, 2014 (12 pages).
- R. Sunkam Ramanujam, B. Lin, "Randomized Throughput-Optimal Oblivious Routing for Torus Networks," IEEE Transactions on Computers, IEEE Digital Library, publication date: November 29, 2011. (14 pages)
- 3. R. Sunkam Ramanujam, B. Lin, "Randomized Partially-Minimal Routing: Near-Optimal Oblivious Routing for 3D Mesh Networks," IEEE Transactions on VLSI, IEEE Digital Library, publication date: November 24, 2011. (14 pages)
- 4. H. Wang, H. Zhao, B. Lin, J. Xu, "DRAM-based Statistics Counter Array Architecture with Performance Guarantee," IEEE/ACM Transactions on Networking, IEEE Digital Library, publication date: October 20, 2011. (14 pages)
- 5. H. Wang, H. Zhao, B. Lin, J. Xu, "Robust Pipelined Memory System with Worst Case Performance Guarantee," IEEE Transactions on Computers, IEEE Digital Library, publication date: August 31, 2011. (15 pages)
- N. Hua, B. Lin, J. Xu, H. Zhao, "BRICK: A Novel Exact Active Statistics Counter Architecture," IEEE/ACM Transactions on Networking, Vol. 19, No. 3 (June 2011), pp. 670-682. (13 pages)
- 7. R. Sunkam Ramanujam, V. Soteriou, B. Lin, L.-S. Peh, "Extending the Effective Throughput of NoCs with Distributed Shared-Buffer Routers," IEEE Transactions on Computer-Aided Design of Circuits and Systems, Vol. 30, No. 4 (April 2011), pp. 548-561. (14 pages)
- 8. B. Lin, I. Keslassy, "The Concurrent Matching Switch Architecture," IEEE/ACM Transactions on Networking, Vol. 18, No. 4 (August 2010), pp. 1330 1343. (14 pages)
- 9. B. Lin and I. Keslassy, "The Interleaved Matching Switch Architecture," IEEE Transactions on Communications, Vol. 57, No. 12 (December 2009), pp. 3732-3742. (11 pages)
- J. Chou and B. Lin, "Coarse Optical Circuit Switching by Default, Re-Routing over Circuits for Adaptation," OSA Journal of Optical Networking, (now the IEEE/OSA Journal of Optical Communications and Networking), Vol. 8, No. 1 (January 2009), pp. 33-50. (18 pages)
- 11. N. Hua, C. Zhao, B. Lin, and J. Xu, "Rank-Indexed Hashing: A Compact Construction of Bloom Filters and Variants," IEEE Conference on Network Protocols (ICNP), Orlando, FL, October 9-22, 2008, pp. 73-82. (10 pages)

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 13 cases, of which I wrote expert reports for 9 cases, was deposed in 4 cases, and testified at trial in 1 case. The specific cases and services provided are as follows:

- Vizio, Inc. v. LG Electronics, Inc. and LG Electronics USA Inc., Civil Action No. 09-cv-1481-BEL
 - o Expert witness on behalf of Vizio, Inc.
 - o Law firm: Jones Day.
 - o Services provided: Wrote expert report.
- 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
 - o Expert witness on behalf of Vizio, Inc.
 - o Law firm: Jones Day.
 - Services provided: Wrote expert report.
- 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
 - o Expert witness on behalf of Vizio, Inc.
 - o Law firm: Jones Day.
 - o Services provided: Wrote expert reports, was deposed.
- 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.
 - o Services provided: Wrote expert reports, was deposed.
- MOSAID Technologies, Inc. v. Dell, Inc., Atheros Communications, Inc., et al., Case No. 2:11-cv-00179-TIW
 - o Expert witness on behalf of Atheros Communications, Inc.
 - o Law Firm: McDermott Will & Emory.
 - Services provided: Provided expert analysis.
- Hitachi Consumer Electronics Co. Ltd., et al. v. Top Victory Electronics (Taiwan) Co. Ltd., et al., Civil Action No. 2:10-cv-260-JRG.
 - o Expert witness on behalf of Vizio, Inc.
 - o Law Firm: Akin Gump Strauss Hauer & Feld
 - Services provided: Wrote expert reports.
- United States International Trade Commission (USITC) Investigation Number: 337-TA-853 and Technology Properties Limited, LLC v. Kyocera Corporation and Kyocera Communciations, Inc. in the Northern District of California, Case No. 3:12-cv-03860-JSC
 - o Expert witness on behalf of Kyocera Corporation and Kyocera Communciations.
 - o Law firm: Morrison & Foerster.
 - o Services provided: Provided expert analysis.



- NETGEAR, Inc. v. Ruckus Wireless, Inc., Case No. 1:10-cv-00999-SLR / D. Del.
 - o Expert witness on behalf of Ruckus Wireless, Inc.
 - Law firms: Lewis Roca & Rothgerber, Orrick.
 - O Services provided: Wrote expert report, was deposed, and testified at trial.
- 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)
 - o Expert witness on behalf of Arteris, Inc. and Arteris S.A.S.
 - o Law firm: DLA Piper.
 - Services provided: Retained as an expert.
- 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: Wrote expert reports.
- Frontier Communications Corp. v. Google, C.A. No. 10-545 (D. Del)
 - o Expert witness on behalf of Frontier Communications Corp.
 - o Law firm: Steese, Evans & Frankel
 - o Services provided: Provided expert analysis.
- U.S. Ethernet Innovations LLC v. Acer, Inc. et al., Case No. 10-cv-3724 (N.D. Cal.)
 - Expert witness on behalf of Atheros Communications, Inc., Sigma Designs, Inc., and AT&T Services, Inc.
 - Law firms: Reed Smith LLP, Pillsbury Winthrop Shaw Pittman LLP, and Vinson & Elkins LLP
 - o Services provided: Wrote expert reports, was deposed.
- Inter Partes Review of a U.S. Patent.
 - o Expert witness on behalf of Netgear, Inc. and Belkin International, Inc.
 - o Law firm: Reed Smith LLP.
 - O Services provided: Wrote expert report/declaration for IPR petition.

