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CURRENT RESEARCH INTERESTS

- ◆ Mobile Computing
- ◆ QoS Enhancement of IEEE 802.11 WLANs
- ◆ Multicast in Ad-Hoc Wireless Networks
- ◆ Network Calculus
- ◆ Real-Time Communications

EDUCATION

- ◆ **Ph.D.** in Computer Engineering, 1999
Department of Computer Science, Texas A&M University, College Station, Texas
Dissertation: Analysis of network traffic and its applications
- ◆ **M.S.** in Operations Research, 1985
Department of Computer and System Science, Xiamen University, Xiamen, P.R. China
Thesis: The asymptotic regulator design for distributed parameter systems
- ◆ **B.S.** in Applied Mathematics, 1982
Department of Mathematics, Fuzhou University, Fujian, P.R. China
Project: Improvement of multiple linear regression's algorithm and midterm weather forecast

EXPERIENCE

- ◆ 2001 — Present: Research Scientist, Department of Computer Science, University of Virginia
 - ❖ Research Areas
 - Statistical Network Calculus
 - Multicast in Mobile Ad-Hoc Networks
 - ❖ Co-instruct a seminar course "*Mobile Computing and Wireless Networking*" in Fall 2002
- ◆ 1999 — 2001: Research Associate, Department of Electrical and Computer Engineering, Rice University
 - ❖ Research Areas
 - QoS Enhancement of IEEE 802.11 MAC
 - Distributed Scheduling in Multi-Hop Wireless Networks
 - Coordinated Network Scheduling in High Speed Packet Switching Networks
- ◆ 1991 — 1999: Research Assistant/Teaching Assistant, Department of Computer Science and Department of Mathematics, Texas A&M University
 - ❖ Research Areas

- NetEx – a toolkit for delay guaranteed connection-oriented communications in IP over ATM networks
 - Differentiated Services and Integrated Services
 - Hard Real-Time Communications
 - Eigenvalue Computation of Linear Elastodynamics in 3-D Space
- ◆ 1985 — 1991: Lecturer, Department of Computer and System Science, Xiamen University, China
 - ❖ Lectured *Linear Control System, Operations Research, Optimal Control, and Linear Algebra* courses
 - ❖ Research Area
 - Feedback Controller Design for Nonlinear Systems

PUBLICATIONS RELATED TO COMPUTER NETWORKING

➤ Mobile Computing and Wireless Networking

- V. Kanodia, C. Li, A. Sabharwal, B. Sadeghi, and E. Knightly, "Distributed Priority Scheduling and Medium Access in Ad Hoc Networks," in *ACM Wireless Networks Journal (WINET)*, 8(6), November 2002.
- V. Kanodia, C. Li, A. Sabharwal, B. Sadeghi, and E. Knightly, "Ordered Packet Scheduling in Wireless Ad Hoc Networks: Mechanisms and Performance Analysis," in *Proceedings of ACM MOBIHOC 2002*, Lausanne, Switzerland, June 2002.
- V. Kanodia, C. Li, A. Sabharwal, B. Sadeghi, and E. Knightly, "Distributed Multi-Hop Scheduling and Medium Access with Delay and Throughput Constraints," in *Proceedings of ACM MOBICOM 2001*, Rome, Italy, July 2001.

➤ Coordinated Multihop Scheduling

- C. Li and E. Knightly, "Coordinated Multihop Scheduling: A Framework for End-to-End Services," *IEEE/ACM Transactions on Networking*, 10(6), December 2002.
- C. Li and E. Knightly, "Schedulability Criterion and Performance Analysis of Coordinated Schedulers," in *Proceedings of the 17th ITC*, Salvador, Brazil, September 2001.
- C. Li and E. Knightly, "Coordinated network scheduling: A Framework for End-to-End Services," in *Proceedings of IEEE ICNP 2000*, Osaka, Japan, November 2000.

➤ Scalable Admission Control

- B. Choi, D. Xuan, C. Li, R. Bettati, and W. Zhao, "Utilization-Based Admission Control for Scalable Real-Time Communications," accepted by *Journal of Real-Time System*.
- D. Xuan, C. Li, R. Bettati, Jianer Chen, and W. Zhao, "Utilization-Based Admission Control for Real-Time Applications," in *Proceedings of IEEE ICPP 2000*, Toronto, Canada, August 2000.
- B. Choi, D. Xuan, C. Li, R. Bettati, and W. Zhao, "Scalable QoS Guaranteed Communication Services for Real-Time Application," in *Proceedings of IEEE ICDCS 2000*, Taipei, Taiwan, April 2000.

➤ Network Security

- Y. Guan, C. Li, D. Xuan, R. Bettati, and W. Zhao, "Preventing Traffic Analysis for Real-Time Communication Networks," in *Proceedings of IEEE MILCOM 1999*, Atlantic City, New Jersey, November 1999.

➤ Real-Time Systems

- C. Li, R. Bettati, and W. Zhao, "Response Time Analysis for Distributed Real-Time Systems with Bursty Job Arrivals," in *Proceedings of IEEE ICPP 1998*, Minneapolis, MI, August 1998.

➤ **Deterministic QoS Guarantees**

- J. K. -Y. Ng, S. Song, C. Li, and W. Zhao, "A New Method for Integrated End-to-End Delay Analysis in ATM Networks," *Journal of Communications and Networks*, Vol. 1, Number 3, September 1999.
- C. Li, R. Bettati, and W. Zhao, "New Delay Analysis Method in High Speed Networks," in *Proceedings of IEEE ICPP 1999*, Wakamatsu, Japan, September 1999.
- C. Li, R. Bettati, and W. Zhao, "Static Priority Scheduling for ATM Networks," in *Proceedings of IEEE RTSS 1997*, San Francisco, CA, December 1997.
- C. Li, A. Raha, and W. Zhao, "Stability in ATM Networks," in *Proceedings of IEEE INFOCOM 1997*, Kobe, Japan, April 1997.

PROFESSIONAL MEMBER AFFILIATIONS

- ◆ IEEE member 1998-present
- ◆ American Mathematics Society member 1993-1996

PROFESSIONAL ACTIVITIES

Referee for IEEE/ACM Transactions on Networking, Computer Networks Journal, Journal of Real-Time System, IEEE INFOCOM Conference, ACM SIGMETRICS Conference, IEEE Real-Time System Symposium, IEEE IWQoS Workshop, and Mathematical Reviews

REFERENCE

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