

Wuqin Lin

Room 594, 2001 Sheridan Road, Evanston, IL 60208, (847) 491-2535, wuqin-lin@kellogg.northwestern.edu

RESEARCH INTERESTS Stochastic Networks, Resource Allocation and Performance Analysis of Computer, Telecommunication and Manufacturing Systems, Health Care Management

EDUCATION **Georgia Institute of Technology**, Atlanta, GA
Ph.D. in Industrial & Systems Engineering, Aug. 2005
GPA: 4.0/4.0
Thesis: Dynamic Control in Stochastic Processing Networks
Advisor: Dr. Jim Dai

The Hong Kong University of Science & Technology, Hong Kong
Master of Philosophy in Industrial Engineering & Engineering Management, Jan. 2001
GPA: 4.0/4.0
Thesis: On Dynamic Crane Deployment in Container Terminals
Advisors: Dr. Raymond Cheung and Dr. Chung-Lun Li

Shanghai Jiao Tong University, Shanghai, China
Bachelor of Science in Electronic Communication, June 1998
GPA: 3.6/4.0
Minor: International Finance

PROFESSIONAL EXPERIENCE **Northwestern University**, Kellogg School of Management, Evanston, IL
Assistant Professor in Managerial Economics and Decision Sciences September 2006 - present

Northwestern University, Kellogg School of Management, Evanston, IL
Jacobs Scholar in Managerial Economics and Decision Sciences July 2005 - August 2006

Georgia Institute of Technology, School of ISyE, Atlanta, GA
Research and Teaching Assistant Jan. 2001 - May 2005

Georgia Institute of Technology, School of ISyE, Atlanta, GA
Instructor (Stochastic Manufacturing and Service Systems) Fall 2004

IBM Watson Research Center, Hawthorne, NY
Research Intern May 2003 - Dec. 2003

The Hong Kong University of Science & Technology, Hong Kong
Teaching Assistant Sept. 1998 - June 1999, Jan. 2000 - Jan. 2001

Transportation & Logistics Lab at HKUST, Hong Kong
Research Assistant June 1999 - Jan. 2000

ATM Networking Lab at SJTU, Shanghai, China
Research Assistant Nov. 1997 - July 1998

PUBLICATIONS R. K. Cheung, C.-L. Li and W. Lin, Interblock crane deployment in container terminals. *Transportation Science* **36**: 79-93 (2002).

J. G. Dai and W. Lin, Maximum pressure policies in stochastic processing networks. *Operations Research* **53**: 197-218 (2005).

W. Lin, Z. Liu, H. Xia and L. Zhang, Optimal capacity allocation for web systems with end-to-end delay guarantees. *Performance Evaluation* **62**: 400-416 (2005).

J. G. Dai and W. Lin, Asymptotic optimality of maximum pressure policies in stochastic processing networks. *Annals of Applied Probability*. **18**: 2239-2299 (2008)

B. Ata and W. Lin, Heavy traffic analysis of maximum pressure policies for stochastic processing

networks with multiple bottlenecks. *Queueing Systems: Theory and Applications* **59** : 191-235 (2008).

W. Lin, β -Maximum pressure policies in stochastic processing networks. In preparation.

M. Lariviere and W. Lin, Risk Aversion and Single Server Queue In preparation.

INVENTIONS

W. Lin, Z. Liu, H. Stavoropoulos and H. Xia, Method and apparatus for on-demand resource allocation and job management for messaging services. YOR9-2003-0507-US1. Nov. 2003.

W. Lin, Z. Liu, H. Xia and L. Zhang, Methods and apparatus for cost minimization of multi-tiered e-business infrastructure with end-to-end delay guarantees. YOR8-2003-1025-US1. June 2004.

PRESENTATIONS

W. Lin, Z. Liu, H. Stavoropoulos and C. H. Cathy. Hard deadline queueing system with application to unified messaging service. The Fifth Workshop on MATHematical performance Modeling and Analysis workshop at Sigmetrics, San Diego, CA, June 2003.

J. G. Dai, W. Lin, Z. Liu and C. H. Xia. Diffusion approximations for queueing systems with hard deadlines. INFORMS Annual Meeting, Atlanta, GA, October 2003.

W. Lin, Z. Liu, H. Xia and L. Zhang, Optimal capacity allocation for multi-tiered web systems with end-to-end delay guarantees. The Sixth Workshop on MATHematical performance Modeling and Analysis workshop at Sigmetrics, New York, NY, June 2004.

J. G. Dai and W. Lin, Asymptotic optimality of maximum pressure policies in stochastic processing networks. INFORMS Annual Meeting, Denver, CO, October 2004.

J.G. Dai, and W. Lin, Dynamic control in stochastic processing networks: maximum pressure policies. Kellogg/McCormick Joint Operations Seminar Series, Evanston, IL, November 2005.

J.G. Dai, and W. Lin, Asymptotic optimality of maximum pressure policies in stochastic processing networks. Stochastic Networks Conference, Urbana, IL, June 2006.

B. Ata and W. Lin, Heavy traffic analysis of maximum pressure policies for stochastic processing networks with multiple bottlenecks. INFORMS Annual Meeting, Pittsburgh, PA, November 2006.

W. Lin, MaxWeight policies in stochastic processing networks. INFORMS Annual Meeting, Seattle, WA, November 2007.

W. Lin, β -Maximum pressure policies in stochastic processing networks: heavy traffic analysis. Georgia Tech Stochastic Systems Group Workshop, Atlanta, GA, February 2008.

M. Lariviere and W. Lin, Risk aversion and single server queue. INFORMS Annual Meeting, Washington DC, October 2008.

W. Lin, β -Maximum Pressure Policies in Stochastic Processing Networks. MIT Operations Research Center Seminar Series, Boston, MA, December 2009.

AWARDS

Sigma Xi Best Ph.D. Thesis Award from Georgia Tech 2005

Exceptional Student of Shanghai Jiao Tong University (Top 1%)

China Computer Software Certificate (Rank: Software Engineer)

HKUST Postgraduate Studentship 1998 - 2000

Tung's & Orient Overseas Scholarship 1998

AT&T Science & Technology Development Scholarship 1995 (Top ten SJTU EE undergraduates)

SJTU Excellence Scholarship 1994 - 1998