

# Liping Qian

## Curriculum Vitae

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### Basic information

Liping Qian Female, was born in Zhejiang Province, China, in April, 1981.

### Research interests

- 1 Wireless Communication and Ad Hoc Network.
- 2 Adaptive Resource Allocation.
- 3 Stochastic Control and Global Optimization.
- 4 Smart Grid.

### Research experience

- 2010.07 — Design the distributed power control scheme that maximizes a system utility in wireless ad hoc networks.  
present
- 2011.01 — Study peak demand management in smart grid.  
present
- 2006.08 — Achieve global optimal solution to non-convex wireless power control problems.  
2010.06
- 2008.08 — Study joint base station association and power control.  
present
- 2004.09 — Study random access in IEEE 802.11 multi-rate wireless ad hoc networks.  
2006.07
- 2004.09 — Network switch design using Intel IXP 450 processor.  
2006.07

### Publications

## Journal papers

- 1 L. Qian\*, Y. J. Zhang, and J. Huang, "MAPEL: Achieving global optimality for a non-convex power control problem," *IEEE Trans. on Wireless Communications*, vol. 8, no. 3, pp. 1553-1563, March 2009, (IF:1.9; SCI: 000264293200063).
- 2 L. Qian\* and Y. J. Zhang, "S-MAPEL: Monotonic optimization for non-convex joint power control and scheduling problems," *IEEE Trans. on Wireless Communications*, vol. 9, no. 5, pp. 1708 - 1719, May 2010, (IF:1.9; SCI: 000277775400020).
- 3 L. Qian\*, Y. J. Zhang, and M. Chiang, "Globally Optimal Distributed Power Control for Nonconcave Utility Maximization," under revision for *IEEE Trans. on Wireless Communications*.

## Conference papers

- 1 L. Qian\*, Y. J. Zhang, and M. Chiang, "Globally Optimal Distributed Power Control for Nonconcave Utility Maximization," *IEEE Globecom'10* Miami, Florida, December 2010, (SCI:000287977403008).
- 2 Jieying Chen, L. Qian\*, and Y. J. Zhang, "On Optimization of Joint Base Station Association and Power Control via Benders' Decomposition," *IEEE Globecom'09*, Honolulu, HI USA, December 2009, (SCI: 000280579101215).
- 3 L. Qian\*, Y. J. Zhang, "Monotonic optimization for non-concave power control in multiuser multicarrier network systems," *Proc. IEEE Infocom'09*, Brazil, April 2009, (SCI: 000275366200020).
- 4 L. Qian\*, Y. J. Zhang, "Optimal throughput-oriented power control by linear multiplicative fractional programming," *Proc. IEEE ICC'08*, pp. 4009-4015, Beijing, China, May 2008, (SCI: 000259505002243).
- 5 L. Qian\*, J. Zhou, Y. Qian, and K. Chen, "A novel auto-rate adaptation scheme for wireless ad hoc networks," *Proc. ICWMMN'06*.
- 6 L. Qian\*, J. Zhou, Y. Qian, and K. Chen, "Improved Opportunistic Auto Rate Media Access Protocol for Multi-rate Ad Hoc Networks," *Proc. IEEE WiCOM'06*, pp. 1-4, Sept. 2006, (SCI: 000257509900220).

- 7 Y. Qian, J. Zhou, L. Qian\*, and K. Chen, "Highly Scalable Multihop Clustering Algorithm for Wireless Sensor Networks," *Proc. IEEE ICCAS'06*, pp. 1527-1531, June 2006, (SCI: 000241262902017).

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## Education background

- 2010.07 — present Research Fellow, *Dept. of Information Engineering*, The Chinese University of Hong Kong.
- 2006.08 — 2010.06 Ph.D. in Information Engineering, *Dept. of Information Engineering*, The Chinese University of Hong Kong.
- 2009.06 — 2009.08 Visiting Student, *Dept. of Electrical Engineering*, Princeton University.
- 2004.09 — 2006.07 Ph.D. Candidate in Electromagnetic Field and Microwave Technique, and then quitted, *Dept. of Information Science and Electronic Engineering*, Zhejiang University.
- 2000.09 — 2004.07 B.E. in Information Engineering, *Dept. of Information Science and Electronic Engineering*, Zhejiang University.

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## Selected Honors and Awards

- 1 2011 The IEEE Marconi Prize Paper Award in Wireless Communications.
- 2 Outstanding Teaching Assistant Award from The Chinese University of Hong Kong, 2010.
- 3 The CNOOC grant for oversea exchanging from The Chinese University of Hong Kong, 2009.
- 4 The Student Scholarship from The Chinese University of Hong Kong every year.
- 5 CUHK Postgraduate Student Grants for Overseas Academic Activities, 2008-09.
- 6 The Student Scholarship from Zhejiang University every year.

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## Teaching experience

- 1 Teaching Assistant, The Chinese University of Hong Kong, 2006.09-2010.05.

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## Professional activities

- Review for IEEE Transactions on Wireless Communications, IEEE Transactions on Communications, IEEE Transactions on Vehicular Technology, WINET, Globecom'07, ICC'08, MASS'08, WCNC'10, ICC'10, Globecom'10.



## Supervisor

Prof. Ying Jun  
(Angela)  
Zhang

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