

# Curriculum Vitae

## Zheng Yang

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## Personal Profile

Zheng Yang is currently a post-doc fellow in the Department of Computer Science and Engineering of Hong Kong University of Science and Technology, working with Prof. Yunhao Liu.

He received his B.E. degree in the Department of Computer Science from Tsinghua University, Beijing, China, and his Ph.D. degree in the Department of Computer Science and Engineering of Hong Kong University of Science and Technology.

Dr. Yang is the author and co-author of 15 research papers in premier journals and conferences related to wireless sensor networks and pervasive computing. He also serves as a technical program committee member of ICPADS' 10 (IEEE International Conference on Parallel and Distributed Systems) and a reviewer of over 10 conferences and journals. He is a member of the IEEE and the ACM.

## Education

September 2006 – June 2010      Department of Computer Science and Engineering, Hong Kong University of Science and Technology, Hong Kong

September 2002 - July 2006      Department of Computer Science and Technology, Tsinghua University, Beijing, China

Ph.D. Dissertation: Localization and Localizability in Sensor and Ad-hoc Networks

Advisor: Prof. Yunhao Liu

Defense Date: June, 2010

## Research Interest

Wireless ad-hoc and sensor networks, Pervasive Computing, Network Localization

## Awards/Honors

Post-graduate Scholarship, HKUST, 2006 – 2010

Selected as a Participant in ACM Student Research Competition, Mobicom'09, 2009

“Tsinghua-Toshiba Scholarship”, Tsinghua University, 2006

“Tsinghua-China Merchants Bank Scholarship”, Tsinghua University, 2005

Second Prize, Outstanding Scholarship, Tsinghua University, 2004

Second Prize, Physics Contest of College Student, 2003

Second Prize, National Physics Contest (Chinese Physics Olympiad), 2002

## Recent Publications

### Journal

1. Zheng Yang, Yunhao Liu, and Xiang-yang Li, Beyond Trilateration: On the Localizability of Wireless Ad-hoc Networks, accepted to appear at IEEE/ACM Transactions on Networking (ToN).
2. Xiaoping Wang, Zheng Yang, Jun Luo, and Changxiang Shen, Beyond Rigidity: Obtain Localizability with Noisy Ranging Measurement, accepted to appear at International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC).
3. Yunhao Liu, Zheng Yang, Xiaoping Wang, and Lirong Jian, Location, Localization, and Localizability, Journal of Computer Science and Technology (JCST), 25(2): 274-297, Mar, 2010.
4. Zheng Yang and Yunhao Liu, "Quality of Trilateration: Confidence based Iterative Localization", IEEE Transactions on Parallel and Distributed Systems (TPDS), vol. 21, issue. 5, pp. 631-640, May, 2010.
5. Zheng Yang, Bin Xu, Baijian Yang, Jingyao Dai, and Tao Gu, "PAS: Prediction-based Adaptive Sleeping for Diffusion Stimulus Monitoring Sensor Networks", Journal of Ad Hoc & Sensor Wireless Networks, vol. 5, num. 3-4, pp. 235-246, 2008.

### Conference

1. Zheng Yang and Yunhao Liu, "Understanding Node Localizability of Wireless Ad-hoc Networks", IEEE INFOCOM 2010, San Diego, USA, 2010.
2. Lirong Jian, Zheng Yang, and Yunhao Liu, "Beyond Triangle Inequality: Sifting Noisy and Outlier Distance Measurements for Localization", IEEE INFOCOM 2010, San Diego, USA, 2010.

3. Zheng Yang and Yunhao Liu, "On the Localizability of Wireless Ad-hoc and Sensor Networks", ACM MobiCom 2009 Poster, Beijing, China, 2009.
4. Kebin Liu, Zheng Yang, Mo Li, Zhongwen Guo, Ying Guo, Feng Hong, Xiaohui Yang, Yuan He, Yuan Feng, Yunhao Liu, "OceanSense: Monitoring the Sea with Wireless Sensor Networks", ACM MobiCom 2009 Poster, Beijing, China, 2009.
5. Zheng Yang, Yunhao Liu, and Xiangyang Li, "Beyond trilateration: On the localizability of Wireless Ad-hoc Networks", IEEE INFOCOM 2009, Rio de Janeiro, Brazil, 2009.
6. Mo Li, Yunhao Liu, Jiliang Wang, and Zheng Yang, "Sensor Network Navigation without Locations", IEEE INFOCOM 2009, Rio de Janeiro, Brazil, 2009.
7. Mo Li, Jiliang Wang, Zheng Yang, and Jingyao Dai, "Demo Abstract: Sensor Network Navigation without Locations", In Proceedings of the 6th ACM Conference on Embedded Networked Sensor Systems (ACM SenSys), Raleigh, North Carolina, USA, November 2008.
8. Zheng Yang and Yunhao Liu, "Quality of Trilateration: Confidence based Iterative Localization", IEEE ICDCS 2008, Beijing, China, 2008.
9. Zheng Yang, Mo Li, and Yunhao Liu, "Sea Depth Measurement with Restricted Floating Sensors", 28th IEEE International Real-Time Systems Symposium (RTSS), Tucson, Arizona, USA, 2007.
10. Zheng Yang, Bin Xu, Jingyao Dai, and Tao Gu, "PAS: Prediction-based Adaptive Sleeping for Environment Monitoring in Sensor Networks", ICPP's workshop uPADS, Xian, China, 2007.

## **Services and Professional Activities**

### **Technical Program Committee Member**

ICPADS(2010)

### **Reviewer**

I had also been invited to serve as a reviewer a number of conferences and journals.

MobiCom(2009), MobiHoc(08,09), INFOCOM(2008,2009,2010), ICDCS(2009,2010), RTSS(2008,2009,2010), ICNP(2009), PerCom(2009), SECON(2010), ICPP(2009), MASS(2008), RTAS(2010)

IEEE Transactions on Parallel and Distributed Systems (TPDS), IEEE Transactions on Mobile Computing (TMC), IEEE Transactions on Networking (ToN), Springer Computer Networks