

Xiaoqi Xu

Beijing, China

E-mail: xiaoqi_xu@mckinsey.com

EDUCATION

Columbia University, Graduate School of Arts and Sciences, NY, NY Sep 2010-Jul 2013

Ph.D., Civil Engineering and Engineering Mechanics, GPA 4.07/4.00

Dissertation title: Integrating Building Networks and Occupant Networks for Aggregate Energy Efficiency

Advisors: Prof. Patricia J. Culligan, Prof. John E. Taylor

Columbia University, Fu Foundation School of Engineering and Applied Science, NY, NY Sep 2010-Oct 2011

M.S. in Construction Engineering and Management, GPA 4.03/4.00

Tsinghua University, Department of Civil Engineering, Beijing, China Sep 2006-Jul 2010

B.S. in Construction Engineering and Management, GPA **ranked 1st** in department

Peking University, China Center for Economic Research, Beijing, China Sep 2008-Jul 2010

B.S. in Economics, Dual Major

SELECTED HONORS AND AWARDS

- Giorgio Ruffolo Post-Doctoral Research Fellowship in Sustainability Science, Harvard University Sep 2013-Aug 2014
- Presidential Fellowship, Columbia University Sep 2010-Aug 2014
Prestigious fellowship for incoming PhD students providing full financial support for four years
- Outstanding Graduation Honor of Beijing 2010 Jul 2010
- Jones Lang LaSalle Fellowship for outstanding students in urban and real estate studies Nov 2009
- National Merit Scholarship, the Ministry of Education of China Sep 2008 & Sep 2009
Awarded twice, offered to top 1% of the undergraduates in high-ranking universities in China
- First Class University Scholarship for Academic Excellence, Tsinghua University Sep 2007

PROFESSIONAL AND RESEARCH EXPERIENCE

Junior Associate: McKinsey & Company, Beijing, China Aug 2014-present

Post-Doctoral Fellow: Harvard Kennedy School, Boston, MA Sep 2013-Aug 2014

- Contribute to the Sustainable Energy Development in China Initiative in the Sustainability Science Program at Mossavar-Rahmani Center for Business and Government and the Energy Technology Innovation Policy project, a joint project of the Science Technology and Public Policy Program and the Environment and Natural Resources Program at the Belfer Center for Science and International Affairs
- Collaborate with faculty host Henry Lee and Prof. Laura D. Anadon

Energy Input Analysis Intern: Urban Design Lab, The Earth Institute at Columbia, NY, NY Jan-Jun 2012

- Synthesized energy and urban heat island implications of the various techniques for rooftop farming and building-integrated controlled environment agriculture in NYC
- Prepared the project report "Sustainable Urban Agriculture: Confirming Viable Scenarios for Production" for New York State Energy Research & Development Authority

Undergraduate thesis: “An innovative prediction model for housing price spatial gradients in Beijing” Feb-Jun 2010

- Conducted independent work funded by China NSF, obtaining highest score among all theses in the department
- Created a Beijing housing database in ArcGIS and predicted prices by network optimization of commuting route

Research Assistant: “Corporate Strategy for Foshan Railway Investment Co. Ltd,” Beijing, China Sep 2009-Feb 2010

- Guided by Prof. Huapu Lu, director of Institute for Transportation Engineering at Tsinghua University
- Interviewed clients and wrote a report analyzing financing options for large scale rail/ infrastructure investment

Project Management Intern: PM Link Pte Ltd, CPG Consultants, Singapore Jul-Sep 2009

- Drafted internal documents (bidding request) according to strict protocols
- Assisted in writing the report on cross country analysis and feasibility of market entry into mainland China

Trainee/Intern: China Overseas Land & Investment Ltd, Beijing, China May-Oct 2009

- Received systematic investment training from top executives at the top real estate developer in China

PUBLICATIONS

1. **Xu, X.**, Culligan, P.J., and Taylor, J.E. (2014). “Energy Saving Alignment Strategy: Achieving Energy Efficiency in Urban Buildings by Matching Occupant Temperature Preferences with a Building 's Indoor Thermal Environment,” *Applied Energy*, 123:209-219
2. **Xu, X.**, Taylor, J.E., and Pisello, AL. (2014). “Network Synergy Effect: establishing a synergy between building network and peer network energy conservation effects,” *Energy and Buildings*, 68:312-320
3. **Xu, X.**, Taylor, J.E., Pisello, AL. and Culligan, P.J. (2012). “The impact of place-based affiliation networks on energy conservation: an holistic model that integrates the influence of buildings, residents and the neighborhood context,” *Energy and Buildings* (Impact Factor = 2.386), 55: 637–646.
4. Pisello, A.L., Taylor, J.E., **Xu, X.** and Cotana, F. (2012). “Inter-building effect: simulating the impact of a network of buildings on the accuracy of building energy performance predictions,” *Building and Environment* (Impact Factor = 2.400), 58: 37-45.
5. Pisello, A.L., **Xu, X.**, Taylor, J.E. and Cotana, F. (2012). “Network of buildings’ impact on indoor thermal performance,” *Smart and Sustainable Built Environment*, 1(1): 73 - 86.
6. **Xu, X.**, Pisello, AL. and Taylor, J.E. (2011). “Simulating the impact of building occupant peer networks on inter-building energy consumption,” in *Proceedings of the 2011 INFORMS Winter Simulation Conference*, S. Jain, R.R. Creasey, J. Himmelspach, K.P. White, and M. Fu, Eds., pp. 3378-3387. Piscataway, New Jersey: Institute of Electrical and Electronics Engineers, Inc.
7. **Xu, X.** and Zheng, S., “The evolvement of urban centers in Shenzhen: An empirical analysis based on housing price spatial gradients,” In *Working Paper Series of the Institute of Real Estate Studies, Tsinghua University*.
8. **Xu, X.**, Anadon, L.D., and Lee. H. (under preparation). “A quantitative evaluation of the policy options to increase residential building energy efficiency in China,” planned submission to *Energy Policy*
9. Huenteler, J., Santen, N., Surana, K., Xia, D., and **Xu, X.** (under preparation). “A tour of distributed electricity systems in five major economics and opportunities for policy research,” planned publication as *Belfer Center Discussion Paper* at Harvard Kennedy School

SELECTED CONFERENCE AND OTHER PRESENTATIONS

1. “Opportunities and barriers of building energy sustainability: A quantitative study of policy instruments,” *International Conference on Energy and Management*, Bilgi University, Istanbul, Turkey. Jun 5-7, 2014.
2. “A quantitative evaluation of the policy options to increase residential building energy efficiency in China,” *STPP-ETIP All Staff Meeting*, Belfer Center for Science and International Affairs, Harvard Kennedy School, Cambridge, MA, United States. Jul 16, 2014.

3. “Opportunities and barriers of building energy sustainability: A quantitative study of policy instruments in China,” *Sustainability Science Program Seminar*, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, Cambridge, MA, United States. Apr 21, 2014.
4. “Modeling the Impact of Building Occupant Social Networks on Inter-building Energy Consumption in a Neighborhood Context,” *NSF IGERT Seminar*, Columbia University, New York, NY, United States. Mar 20, 2012
5. “Simulating the impact of building occupant peer networks on inter-building energy consumption,” *2011 INFORMS Winter Simulation Conference*, Phoenix, AZ, United States. Dec 11-14, 2011.

TEACHING EXPERIENCE

Teaching Assistant: ENGI E1112 - Gateway Lab, Introduction to Civil Engineering Design, NY, NY Jan-May 2013

- Help students develop collaboration, communication, problem solving, and project management skills, aligned with the technical components of the engineering design

Peer Advisor: International Students & Scholars Office, Columbia University, NY, NY May 2012-Present

- Advise incoming students on academic affairs and campus life

SERVICE AND STUDENT ACTIVITIES

Associate: Integrative Graduate Education and Research Traineeship (IGERT) Dec 2011-Jul 2013

- Affiliate to the “Solving Urbanization Challenges by Design” program funded by the NSF

Department Representative: Engineering Graduate Student Council, Columbia University Feb-Sep 2012

- Acted as the primary voting body in the decision making process of engineering school’s student affairs

Executive Vice President: Association of International Cultural Exchange, Tsinghua University Mar 2008-Jun 2009

- Led the association to become a “Top Ten” student organizations on campus (2nd out of 104 in total)

Team Leader: Political Studies Group, Tsinghua University Feb-Jul 2009

Captain: Department Women Volleyball Team, Tsinghua University Apr 2007-Mar 2009

Volunteer: The 29th Olympic Games in Beijing Mar-Sep 2008

SKILLS AND INTERESTS

Computer: ArcGIS, EnergyPlus, OpenStudio, DesignBuilder, SketchUp, MATLAB, Artificial Neural Network, AutoCAD, STATA, SQL, MS Office (advanced in Excel)

Language: English (fluent), Chinese (native in Beijing dialect)

Interests: Competitive games in swimming (Bronze medal winner at Tsinghua), Taekwondo, Dancing