

Perry Pei-Ju Yang

Curriculum Vitae

Associate Professor
School of City and Regional Planning + School of Architecture
College of Architecture, Georgia Institute of Technology

Director, Sino-U.S. Eco Urban Lab, Georgia Tech and Tongji University

Bayer (Covestro) Chair Professor, UNEP (United Nations Environment Program) -
Tongji Institute of Environment for Sustainable Development



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Eco Urban Lab: <http://www.ecourbanlab.org>

Biosketch

Perry Yang is an Associate Professor jointly appointed to School of City and Regional Planning and School of Architecture at the Georgia Institute of Technology. He is also the Bayer (Covestro) Chair Professor at the United Nations Environment Program (UNEP) - Tongji Institute of Environment for Sustainable Development in Shanghai. He directs the *Sino-U.S. Eco Urban Lab* at Georgia Tech and Tongji University. Perry's work focuses on promoting the ecological and energy performance of cities through urban design. He has been awarded prizes in international competitions continuously, including the *2009 World Games Park* at Kaohsiung, Taiwan in 2005, a project opened in July 2009 and featured by CNN as "an eco-friendly venue". He founded *ESD (Eco Systems Design Studio)*, an urban design practice from 2005. His urban design work was featured in the January 2010 issue *Ecological Urbanism at WA (World Architecture)*, a leading architecture journal in China by Tsinghua University. Yang received degrees from National Taiwan University (Ph.D., M.Sc., B.Sc.) and Massachusetts Institute of Technology (MS) and was a Fulbright Scholar at MIT in 1999-2000. Prior to joining the Georgia Tech faculty, he was assistant professor at National University of Singapore. He is a board member of the *International Urban Planning and Environment Association (UPE)*, and served as co-chair of *UPE9* in 2010. As an international scientific committee member of *International Conference on Applied Energy (ICAE)*, Perry chaired the session *Urban Energy Systems Design* at the ICAE in March 2015 at Abu Dhabi. He is a member of *the Global Carbon Project* headquartered in Tsukuba Japan, and was recently invited to chair and speak at the concluding session of *the Global Carbon Project Workshop on Urban Resilience* at the University of Tokyo in December 2015.

I. Earned Degrees

Ph.D. (Building & Planning), National Taiwan University, 2001

MS (Urban Studies and Planning), Massachusetts Institute of Technology (MIT), 2000

M.Sc. (Building & Planning), National Taiwan University, 1994

B.Sc. (Agriculture Engineering/ Bioenvironmental Systems Engineering), National Taiwan University, 1991

II. Employment History

Director	Sino- U.S. Eco Urban Lab, Georgia Tech and Tongji University, January 2014 to Present
Associate Professor	School of City and Regional Planning and School of Architecture, College of Architecture, Georgia Institute of Technology, January 2009 to Present
Bayer (Covestro) Chair Professor, UNEP (United Nations Environment Program) - Tongji Institute of Environment for Sustainable Development (IESD), from 2014 to 2016	
Visiting Professor	College of Architecture and Urban Planning, Tongji University, Fall 2011 and again from January 2014 to Present
Assistant Professor	Department of Architecture, School of Design and Environment, National University of Singapore (NUS), June 2001 to December 2008. (Served as the Leader of Urban Design Group in the Department of Architecture, NUS from 2001 to 2005)
Fellow	Special Program for Urban and Regional Studies (SPURS), Department of Urban Studies and Planning, Massachusetts Institute of Technology (MIT), 1999-2001.
Planner	Moh & Associates Inc. (MAA), 1997-1999.

III. Honors and Awards

1. 1st prize, *the Campus Planning Competition of Beijing Information Technology University*, 2011, as the Chief Designer, in collaboration with a. BUE (Beijing Urban Engineering Design Institute).
**China has built hundreds of university campuses around the country in the past two decades. Perry led a design team and was responsible for the conceptual design of the campus to win over ten other prestigious design institutes of the region including Tsinghua University, Tongji University and South China University of Technology who own great reputation and extensive experiences in campus planning, design and implementation.*
2. 1st Prize (one of the two awarded winners out of 36 entries), *International Design Competition of Shunde Green Heart Design*, Guangdong China, 2010, as the Chief Designer. (The other winner sharing the 1st prize was Kongjian Yu of Turenscape, Design Critic of Harvard Graduate School of Design and the Dean of College of Architecture and Landscape Architecture, Peking University).
**The Green Heart Project is situated in the context of a 2000 kilometers greenways project, an initiative of Guangdong Provincial Government in the Pearl River Delta, a rapid growing region known for "the world factory". The green heart project is a hub located in the greenway system that aims for restructuring the area to an ecologically sound urban environment.*

3. 1st prize, *International Design Competition of Eco-City, 'Xiamen's New Downtown at Maluan Bay, 2007*, as the Chief Designer, in collaboration with Xiamen Planning and Design Institute. Other final entries include Nikken Sekkei (Japan) and Urban Design International Co Ltd (Hong Kong).
**Xiamen's Maluan Bay is a waterfront eco town design competition located at the City of Xianmen, one of the six major port cities in China.*
4. 1st prize, international design competition of *the 2009 World Games Park*, Kaohsiung, Taiwan, as the Chief Planner, in collaboration with MAA (Taipei) and COX + Peter Droege (Sydney). Other entries include Richard Rogers Partnership, Mott MacDonald Ltd, ARUP, Taiwan Engineering Consultants Group and Jones Lang LaSalle.
****(After the first prize win, Perry's design was implemented and he served as the Chief Planner of the stage-one master planning team of the 2009 World Games Park. The Games opened in July 2009 that was featured by CNN as an "eco-friendly venue") (See the news in: <http://edition.cnn.com/2009/SPORT/07/16/world.games/index.html>, more details in the Dossier)***
5. The Fulbright Scholarship, 1999-2000, MIT

IV. Research, Scholarship, and Creative Activities

(Indicate with an asterisk those that resulted from work done at Georgia Tech and put the names of student co-authors in boldface.)

A. Published Books, Book Chapters, and Edited Volumes

List all books or parts of books published. Include only those accepted or in-press and indicate their status.

A1. Books

(Refereed single-authored book, in Chinese and partially in English)

1. *Yang, Perry P. J. 2010. *Ecological Urbanism: Scale, Flow and Design*, China Architecture and Building Press. (**China Architecture and Building Press** is a prestigious publisher owned by China's Ministry of Construction with great reputation in the area of architecture, city planning and construction in Chinese language world: <http://en.cabp.cn>).

A2. Refereed Book Chapters

1. Yang, Perry P J, **Quan, Steven J.** 2016. Urban form and energy resilient strategies: A case study of the Manhattan grid, in *Urban Resilience – A Transformative Approach*, Yoshiki Yamagata and Hiroshi Maruyama eds., Springer. (in print)
2. Quan, Steven. Qi Li, Godfried, Augenbroe, Brown, Jason, Yang Perry P. J. 2015. Urban Data and Building Energy Modeling: A GIS-based Urban Building Energy Modeling System Using the Urban-EPC Engine, in *Planning Support Systems and Smart Cities*. Stan Geertman, Joseph Ferreira, Jr. Robert Goodspeed, John Stillwell eds., Springer. (as the corresponding author)
3. *Yang, Perry P. J. 2014. Energy resilient urban planning, in *Geodesign by Integrating design and geospatial sciences*, Lee D and Dias E, Scholten H eds., Springer.

4. *Yang, Perry P. J. 2013. Landscape ecology and its urbanism” in *Landscape Urbanism and its Discontents: Dissimulating the Sustainable City*. Andres Duany and Emily Talen eds., Island Press.
5. *Yang, Perry P. J. 2013. Hydrological effects of urban form and landscape change, in *Planning stormwater resilient urban open spaces*, vol. 3, F.D. Moccia and M.F. Palestino eds. Clean, Napoli.
6. ***Quan, Steven. J., Minter, John**, Yang, Perry P. J. 2013. A GIS-based performance metrics for designing a low energy urban agriculture system, in *Planning Support Systems for Sustainable Urban Development*. Stan Geertman, Fred Toppen, John Stillwell eds., Springer. (as the corresponding author)
7. *Yang, Perry P. J., **Low Seng How**. 2009. An Asian model of TOD – the planning integration and institutional tools in Singapore, in *Transit-Oriented Development: Making It Happen*, edited by Carey Curtis, John Renne, Luca Bertolini, Ashgate Publishing Ltd.
8. Yang, Perry P. J. 2008. Tracking Sustainable Urban Forms and Material Flows in Singapore, in *World Cities and Urban Form: Fragmented, Polycentric, Sustainable?* edited by Mike Jenks, Daniel Kozak and Pattaranan Takkanon, Routledge.
9. Yang, Perry P. J. 2005. From central business district to new downtown: designing future downtown urban form in Singapore, in *Future Forms and Design for Sustainable Cities*, edited by Jenks, Mike. London: Architectural press.
10. Yang, Perry P. J., **Li Ze**. 2005. Two Asian models of planning decision making: Case Studies of the Planning Process in Singapore new downtown and Kaohsiung multifunctional business district, in *Reconstructing Communities: Design Participation in the Face of Change*, edited by Jeffrey Hou, Mark Francis, Nathan Brightbill. Davis: Reprographics, University of California, Davis.
11. Yang, Perry P. J., Johnson Marshall. 1994. Participatory Design, Project in Sanchung, Taiwan, in *Ecological Practice and Public Health: From Vision to Practice*, edited by Chu,C and Simpson, R. Toronto: University of Toronto.

A3. Edited Volumes

N/A

B. Refereed Publications and Submitted Articles

B1. Published and Accepted Journal Articles

(Refereed journal articles published)

1. Li, Zhengwei, **Quan, Steven J.**, Yang, Perry P. J., 2016, Energy performance simulation for planning a low carbon neighborhood urban district: A case study of Macau, in *Habitat International*, 04; 53: 206-214. (as the corresponding author)

2. Yang, Perry P. J., Yan, Jinyue, 2016, Modeling Urban Design with Energy Performance, in *Energy Procedia* (accepted for publication).
3. **Quan, Steven J.**, Wu, Jiang, **Shi, Zhongming**, **Yang, Tianren**, Wang, Yi, Yang, Perry P. J., 2016, Urban Form and Building Energy Performance in Shanghai Neighborhoods, in *Energy Procedia* (accepted for publication).
4. Yang, Perry P. J. 2015. Energy Resilient Urban Form: A Design Perspective, in *Energy Procedia 75*, Elsevier.
5. **Quan, Steven.** Qi Li, Godfried, Augenbroe, Brown, Jason, Yang Perry P. J. 2015. A GIS-based Energy Balance Modeling System for Urban Solar Buildings. in *Energy Procedia 75*, Elsevier. (as the corresponding author)
6. *Yang, Perry P. J., **Quan, Steven. J.**, Castro- Lacouture, Daniel, Rudolph, Charles, Stuart, Ben. 2014. Performance metrics for designing an algae-powered eco urban district: A Geodesign perspective, in *Energy Procedia 61*, Elsevier.
7. ***Quan, Steven. J.**, Economoua, Athanassions , Grasl, Thomas., Yang, Perry P. J. 2014. Computing energy performance of building density, shape and typology in urban context, in *Energy Procedia 61*, Elsevier (as the corresponding author).
8. *Yang, Perry P. J. 2014. Eco Area Ratio: Energy performance assessment and reduction approach for urban redevelopment in high-density environment, in *Urban Planning Forum*, Vol.03, 91-100, Tongji University. (in Chinese)
9. *Yang, Perry P. J., Chung, Zora Y. C., Tsai, Casey C. J. 2014. Pluralistic and Spatial Strategy of Urban Waterfront Revitalization, in *New Architecture*, 03, 8-11, Huachung University of Science and Technology. (in Chinese)
10. *Yang, Perry P. J., **Li Zhengwei**. 2013. Carbon emission assessment for Central City Districts of Macau, *Planner*, Vol. 03, 08-32. (in Chinese)
11. *Yang, Perry P. J. 2012. Complexity Question in Urban Systems Design, in *Journal of Architectural Engineering Technology*, editorial, Vol. 1, Issue 2, 1-2.
12. Yang, Perry P. J. 2011. From ecocity Taipei to the third ecology proposition and its design approaches, in *Journal of Building and Planning*, National Taiwan University. Number 18, Dec. 2011, Research article, 1-18. (in Chinese)
13. *Tian, Li, Yang, Perry P. J., Dong, Hengping, Liu, Yang. 2011. Comparisons Between Planning Education of China and the USA under the Global Financial Crisis and Sustainable Development, *Urban Planning International*, 2011 Vol.26, No.2, 102-108. (in Chinese)
14. *Yang, Perry P. J. 2010. Ecological Urbanism: Five Dimensions in Design, in Special Issue "Ecological Urbanism", *WA (World Architecture)*, Tsinghua University, 01, 22-27. (in Chinese)
15. *Yang, Perry P. J. 2010. Landscape as Flows: An Ecological Design Approach to Large-scale Urban Landscape, in Special Issue "Ecological Urbanism", *WA (World Architecture)*, Tsinghua University, 01, 80-84. (in Chinese)

16. *Yi, W., Yang, Perry P. J. 2010. Urban as the Second Nature: Conceptual Urban Design of Hulunbeir New District, WA (*World Architecture*), Tsinghua University, 09, 143-145. (in Chinese)
17. *Yang, Perry P. J. 2009. Questioning urban sustainability: social sufficiency, ecological efficiency and ecosystems compatibility. *Journal of Urbanism*, Vol. 2, Issue 3, 187-189.
18. Yang, Perry P. J., **Putra, Simon. Y., Chaerani, Meutia**. 2007. Computing the Sense of Time in Urban Physical Environment, *Urban Design International*. 12, 115-129.
19. Yang, Perry P. J., **Putra, Simon Y., Li Wenjing**. 2007. Viewsphere: GIS-based 3D visibility analysis for urban design evaluation. *Environment and Planning B: Planning and Design*, Vol.34, 971-992.
20. Yang, Perry P. J. 2006. Regional-scale Urbanization and its Ecological Effects: An Application of Geographic Information System, in *Modern Urban Research*, 4, 27-34. (in Chinese)
21. Yang, Perry P. J. 2006. Ecological design in high-density urban environment, in *Modern Urban Research*, 1, 15-24. (in Chinese)
22. Yang, Perry P. J., Ong, Boon Lay. 2005. From eco-system theory to the planning of eco-industrial park, in *Modern Urban Research*, 11, 44-55. (in Chinese)
23. Yang, Perry P. J. 2005. Applying landscape ecology to urban planning and analysis, in *Modern Urban Research*. 09, 32-44. (in Chinese)
24. Yang, Perry P. J., Wang, Hung-Kai. 2005. Eco-city master planning: a planning framework of Taipei eco-city, in *Modern Urban Research*, 07, 16-25. (in Chinese)
25. Yang, Perry P. J. 2005. Downtown design: Asian experience of Singapore, in *City Planning Review*, Vol. 3, 2005. (in Chinese)
26. Yang, Perry P. J. 2005. Historical Evolution of Ecological Planning in Foreign Countries. In *Modern Urban Research*, 2-3, 05: 27-37. (in Chinese)
27. Yang, Perry P. J., Ong, Boon Lay. 2004. Applying ecosystem concepts to the planning of industrial areas: a case study of Singapore's Jurong Island. *Journal of Cleaner Production*, 12, 1011-1023.
28. Yang, Perry P. J., Li Z., Lin C. R. Three Asian Models of Downtown Planning Decision Making, *City Planning Review*, Urban Planning Society of China, accepted for publication. (in Chinese)

(Review article)
29. Yang, Perry P. J. (2007) review of "Enduring Innocence: Global Architecture and its Political Masquerades, Author: Keller Easterling, MIT Press, 2005", *Journal of Architectural Education*, 02. 54-55.
30. Yang, Perry P. J. (2006) review of "Digital Ground: Architecture, Pervasive Computing and Environmental Knowledge, Author: Malcolm McCullough, MIT Press, 2004", *Environment & Planning B: Planning and Design*, Vol 33, 793-795.

B2. Submitted Journal Articles (with date of submission)

1. *Yang, Perry P. J. Eco Area Ratio (EAR) as a wicked problem: An energy performance tool to 'tame' the problem of urban densification, submitted to *Landscape and Urban Planning*, December 2013. (Reviewed and to be revised)
2. *Yang, Perry P. J., **Quan, Steven. J.** 2014. A Geodesign framework for designing a low energy urban agriculture system, submitted to *Environment and Planning: Planning and Design B*, January 2014. (Reviewed and to be revised).
3. *Yang, Perry P. J., **Quan, Steven. J.**, Castro- Lacouture, Daniel. Energy performance evaluation for an algae-powered urban district system, submitted to *Applied Energy*, Elsevier, August 2014 (The paper was selected by *the 2014 International Conference for Applied Energy* for submitting to a special issue in *Applied Energy*). (Reviewed and to be revised)
4. ***Quan, Steven. J.**, Economou, Athanassios, Graslb, Thomas, Yang, Perry P. J. How density and building shape jointly influence energy performance: a typology approach, submitted to *Energy and Building*, December 2014 (as the corresponding author).

B3. Conference Presentation with Proceedings (Refereed)

1. **Li, Qi, Quan, Steven J**, Augenbroe, Godfried, Yang, Perry P J, Brown Jason, 2015, Building energy modeling at urban scale: integration of reduced order energy model with geographical information. *Building Simulation 2015*.
2. **Quan, Steven. Qi Li**, Godfried, Augenbroe, Brown, Jason, Yang Perry P. J. 2015. Urban Data and Building Energy Modeling: A GIS-based Urban Building Energy Modeling System Using the Urban-EPC Engine, in CUPUM 2015- 14th International Conference on Computers in Urban Planning and Urban Management, MIT, Cambridge, July 7-10, 2015.
3. *Yang, Perry P. J. 2014. How does the urban block structure affect energy performance and carbon emission? Benchmarking three downtown urban districts, in *the 54th Annual Conference of ACSF*, Philadelphia, October 30 – November 2, 2014.
4. *Yang, Perry P. J. **Quan, Steven. J.**, 2014. Benchmarking Energy Performance of Asian Downtown Urban Blocks: Shanghai, Taipei and Tokyo, in *Inter-University Seminar on Asian Megacities (IUSAM): Smart Urbanism for Asian Mega Cities*, Hanyang University, Seoul, August 27-30, 2014
5. *Castro- Lacouturea, Daniel, **Quan, Steven. J.**, Yang, Perry P. J., Marshall, Tyron. 2014. Holistic Framework for Integrating Urban Systems, Waste Stream and Algal Cultivation in Residential Construction, in *ISARC2014 – The International Symposium on Automation and Robotics in Construction and Mining*, Sydney, Australia, July 9-11, 2014 (accepted and to be presented).
6. *Yang, Perry P. J., **Quan, Steven. J.**, Castro- Lacouturea, Daniel, Rudolpha, Charles, Stuart, Ben. 2014. GIS-based Planning Support System for Waste Stream and Algal Cultivation in Residential Construction in *2014 Construction Research Congress*, Georgia Institute of Technology, Atlanta, May 19-21, 2014.

7. *Pandit, A., Bras, B., Minne, E. A., Dunham-Jones, E., Augenbroe, G., Jeong, H., James, J.-A. C., Newell, J. P., Weissburg, M., Brown, M. A., Chang, M. E., Xu, M., Begovic, M. M., Yang, Perry P. J., Fujimoto, R. A., French, S. P., Thomas, V. M., Yu, X., Chen, Y., Lu, Z., Crittenden, J. C. 2014. Infrastructure Ecology: An Evolving Paradigm for Sustainable Urban Development, in 106th National American Planning Association Conference, Atlanta, April 26-30, 2014.
8. *Yang, Perry. P. J. 2013. Eco Area Ratio: A carbon mitigation tool for urban redevelopment in the City of Taipei, in *the 12th International Congress of Asian Planning Schools Association (APSA)*, National Taiwan University, Taipei, November 1-2, 2013.
9. *Yang, Perry. P. J., Lin Chin-Rong. 2013. Greening an Industrial Port City: 2009 World Games and Its Urban Impact, in *Olympic Legacies: International Conference, Impacts of Mega-Events on Cities*, London, September 4-6, 2013.
10. *Yang, Perry P. J. 2013. Eco Area Ratio (EAR): An energy performance tool for densification problem in Taipei, in *Asian Urbanism and Beyond: Inter-University Seminar on Asian Megacities*, Chinese University of Hong Kong, Hong Kong, August 15-17, 2013.
11. *Quan, Steven. J., Minter, John, Yang, Perry P. J. 2013. A GIS-based performance metrics for designing a low energy urban agriculture system, in *Computer for Urban Planning and Urban Management (CUPUM)*, Utrecht, Netherlands, July 2-5, 2013. (The article was also published as a book chapter, Springer).
12. *Yang, Perry P. J. 2012. Ecological Urbanism Studio: Global Benchmarking for Low Carbon Urban Design, peer-reviewed and selected under the category “project” and published in *Digital Aptitudes + Other Openings: the 100th ACSA (Association of Collegiate Schools of Architecture) Annual Meeting*, organized by MIT, Boston, March 1-4, 2012.
13. *Li, Zhengwei., Yang, Perry P. J. 2011. Simulation Driven Low Carbon Built Environment, in *The World Congress on Engineering and Technology (CET2011)* and *The 2011 International Conference on Sustainable Development (CSD)*, Shanghai, October 2011.
14. *Yang, Perry. P. J., Ma, Xiangming. 2010. Ecological Urbanism: A Brief Review of Ecocity Models, in *the 9th Symposium of International Urban Planning and Environment Association (UPE9): Rapid Urbanization, Global Recession and Climate Change*, Guangzhou, August 3-6, 2010.
15. *Yang, Perry P. J. 2010. From Ecology in Urbanism to Ecology of Urbanism”, in *the 4th International Association for China Planning (IACP)*, Tongji University, Shanghai, China, June 19-21, 2010.
16. *Yang, Perry P. J., Ma, Xiangming. 2009. Eco-City Planning Hypothesis – A test case in Guangzhou’s Nansha”, *International Conference on Urban and Regional Planning in Transitional China, the 3rd International Association for China Planning (IACP)* Nanjing, China, June 21-23, 2009,.
17. *Yuan, Qifeng, Yang, Perry. P. J. 2009. Transit Oriented Development of Guangzhou Mega City-- A Spatial and Institutional Analysis, in *the 8th Symposium of the International Urban Planning and Environment Association (UPE8): Parallel Patterns of Urban Growth and Decline: Sustainability Issues and Challenges for Spatial Planning in 21st Century Cities and Regions*, University of Kaiserslautern, Germany, March 23-26, 2009.
18. *Tian, Li, Yang, Perry P. J. 2009. Dilemma between Regulatory Planning and Incentive Planning --

Comparisons of Planning Education between China and USA, in *2009 CPN-ACSP Urban Planning Education Roundtable*, Beijing, June 15-17, 2009.

19. Yang, Perry, P. J. 2008. Landscape ecology approach to new downtown design: A case study of Xiamen's Maluan Bay. Presented at *the third International Conference on China's Urban Development and Planning and the Second International Association for China Planning (IACP) Conference*: Langfang, Beijing, China, 2008.
20. Yang, Perry P. J. 2007. Multiscale Assessment of Urban Environmental Performance -- An Approach to Measuring Sustainable Urban Forms and Material Flows, in *UPE7 - The 7th International Conference on Urban Planning and Environment*, Bangkok, Thailand. January 3-5, 2007.
21. Yang, Perry P. J. 2006. The second nature, third ecology and approaches to eco-city design, in *the 4th Great Asian Streets Symposium: Reclaiming the City*, Singapore, 6th – 8th Dec 2006.
22. Yang, Perry P. J. 2006. Tracking Sustainable Urban Form and Flow: A Landscape Ecological Analysis of Singapore's Environmental Change, in *2006 International Forum of Urbanism (IFoU)*, Tsinghua University, Beijing, October 18-29, 2006.
23. **Li, Ze**, Yang, Perry P. J. 2006. The Interplay of Institutional Changes and Urban Transformation: Case Study of Shanghai after 1978, in *2006 International Forum of Urbanism (IFoU)*, 2006, Tsinghua University, Beijing, October 18-29.
24. Yang, Perry P. J., **Putra, Simon Y.** 2006. Design Support System for Sustainable Urban Development: Integrated framework of urban modeling, spatial-environmental analysis and decision-making, in *the Twelfth Annual International Sustainable Development Research Conference*, Hong Kong University, Hong Kong, April 6 - 8, 2006.
25. **Putra, Simon Y.**, Yang, Perry P. J., **Li, Wenjing.** 2005, GIS-based 3D visibility analysis for high-density urban living environment, in *the Fifth China Urban Housing Conference: Human Settlement and Housing Development under Urbanization Process*, Chinese University of Hong Kong, proceeding published by China Architecture and Building Press. November 24-26, 2005.
26. Yang, Perry P. J. 2005. Ecological design in high-density urban living environment, in *the Fifth China Urban Housing Conference: Human Settlement and Housing Development under Urbanization Process.*, Chinese University of Hong Kong, proceeding published by China Architecture and Building Press, November 24-26, 2005.
27. Yang, Perry P. J., **Li, Ze.** 2005. Revitalization of water edge in two Asian port cities: an investigation of the morphological changes of waterfront area in Shanghai and Singapore, in *mAAN (Modern Asian Architecture Network) the 4th International Conference: Safeguarding and Revitalizing Local Heritage*, Tongji University, Shanghai, October 28-30, 2004.
28. **Putra, Simon Y.**, Yang Perry P. J. 2005. Impacts of density on design strategies and visual quality of urban space, in *Empowering People Through Geospatial Information*, Map Asia 2005, Jakarta, Indonesia, August 22-25, 2005.
29. Yang, Perry P. J., **Li, Ze.** 2005. Two Asian Models of Downtown Planning Decision Making: Case Studies of Singapore's New Downtown and Shanghai's City Central Area, in *the 6th International*

- Symposium on Asian Pacific Architecture: Asian Mega Project*, Tongji University, Shanghai, June 9 - 11, 2005.
30. Yang, Perry P. J., **Putra, Simon Y.**, Heng, Chye Kiang. 2004. Computing the "sense of time" in Singapore urban streets, in *the 3rd Great Asian Streets Symposium (GASS): A Public Forum of Asian Urban Design*, National University of Singapore, Singapore, December 6-7, 2004.
 31. **Li, Wenjing, Putra, Simon Y.**, Yang, Perry P. J. 2004. GIS analysis for the climatic evaluation of 3D urban geometry: the development of GIS analytical tools for sky view factor, in *the 7th International Seminar on GIS for Developing Countries (GISDECO 2004): GIS Capacity Building and Infrastructure*, UTM, Johor, Malaysia, May 10 - 12, 2004.
 32. Yang, Perry P. J., **Li, Ze**. 2004. Two Asian models of planning decision making - case studies of the planning process in Singapore New Downtown and Kaohsiung Multifunctional Business District, in *the 5th Pacific Rim Participatory Community Design Conference*, University of Washington, Seattle, September 2-5, 2004.
 33. **Li, Wenjing, Putra, Simon Y., Li, Ze**, Yang, Perry P. J. 2004. Climatic performance of 3D urban geometry, in *the 6th Symposium of the International Urban Planning and Environment Association (UPE6): Global Pressure on Local Autonomy: Challenges to Urban Planning for Sustainability and Development*, University of Louisville, Louisville, September 4-8, 2004.
 34. Yang, Perry P. J. 2004. Transformation of the waterfront settings through urban concepts - experiences of Singapore's waterfront design and development since 1960s, in *the 6th Symposium of the International Urban Planning and Environment Association (UPE6): Global Pressure on Local Autonomy: Challenges to Urban Planning for Sustainability and Development*, University of Louisville, Louisville, September 4-8, 2004.
 35. **Putra, Simon Y, Li, Wenjing**, Yang, Perry P. J. 2003. Object-oriented GIS data modeling and urban design, in *Map Asia 2003*, Kuala Lumpur, Malaysia, October 13-15, 2003.
 36. Yang, Perry P. J. 2003. The integration of urban living and new working environment: urban design case studies of Kallang Basin redevelopment, Singapore, in *the 3rd China Urban Housing Conference*, Chinese University of Hong Kong, Hong Kong, July 3-5, 2003. (The paper was included in proceeding but the presentation was canceled because of SARS outbreak in Hong Kong during the period).
 37. Yang, Perry P. J., **Putra, Simon Y**. 2003. GIS analysis for urban design and redevelopment: case studies of Singapore urban space, in *the 8th International Conference on Computers in Urban Planning and Urban Management (CUPUM): Information Technologies for Urban Sustainability and Prosperity*, Sendai Mediatheque, Sendai, Japan, May 27-29, 2003 (The paper was accepted for presentation. It was not presented due to SARS outbreak in the region during the period).
 38. Yang, Perry P. J. 2002. Ecological urbanism in Asian urban transformation: comparing the planning of two urban rivers in Singapore and Taipei, in *the Fifth Symposium of the International Urban Planning and Environment Association (UPE5)-- Creating Sustainable Urban Environment: Future Forms for City Living*, Christ Church, Oxford, September 23-26, 2002.
 39. Yang, Perry P. J. 2001. Digital Geographic Design: Looking for a New Horizon for Architecture, Landscape and Urban Design Professionals, in *Architectural Education for the Asian Century*:

Proceedings of the 1st ACAE Conference on Architectural Education, ed. Milton Tan, National University of Singapore, Singapore, September 7, 2001.

40. Yang, Perry P. J. 2001. Ecological Effects of Metropolitan Form: A Landscape Ecological Analysis of 20 Years of Urban Sprawl in the Eastern-Taipei Metropolitan Fringes, in *the 1st World Planning Schools Congress: Planning for Cities in the 21st Century, Opportunities and Challenges*, Tongji University, Shanghai, July 11, 2001.
41. Yang, Perry P. J., Wang, Hung-Kai. 2000. The Making of Sustainable Urban Form by Landscape Ecological Planning, in *the 15th Annual Symposium of International Association of Landscape Ecology*, FT Lauderdale, Florida, April 1, 2000.
42. Yang, Perry P. J. 1998. Design with Nature, or Design with Natural Process, in *the 8th International Planning History Conference: Twentieth Century Urban Planning Experience*, ed. Robert Freestone, University of New South Wales, Sydney, Australia)
43. Yang, Perry P. J. 1995. Eco-participatory Planning: A Case Study of the Bunun Tribal Building Plan in Taitung, Taiwan, in *the First International Symposium on Asia Pacific Architecture: The East-West Encounter*, University of Hawaii at Manoa, Honolulu, March 22, 1995.
44. Yang, Perry P. J. 2001. "A Quantitative Analysis of Metropolitan Form: Applying GI Technology to the Analysis of Landscape Change of Keelung River Valley", in *the 5th National Planning Forum*, National Cheng-Kung University, Tainan, Taiwan, March 17, 2001. (in Chinese)

B4. Other Refereed Material

1. **Perry Yang's urban design works was published and featured in the January 2010 Issue "Ecological Urbanism" in *WA (World Architecture)*, 54-64, 2010/01.** (WA is a leading peer-reviewed architecture journal published by Tsinghua University. Two other renowned urban designers, James Corner of University of Pennsylvania and l'AUC from Paris were featured in the same issue, more details in the Dossier).

C. Other Publications and Creative Products

Exhibitions

1. *2015. Curator, Resilient Urban Systems: Studio, Research, Design and Image, the Stubbins Gallery, College of Architecture, Georgia Tech, August 26 – September 11, 2015.
2. *2015. Curator (with Wang Yi of Tongji University), Shanghai Chongming Eco Island Studio Exhibition, in *2015 International Symposium on Ecological Urban Design*, College of Architecture and Urban Planning, Tongji University, June 5-6, 2015.

Creative works awarded in international or national design competitions/ refereed through jury selection process

(Four other 1st prize design competition works are listed on page 1-2 and not repeated here.)

1. *2015. The 2nd Place, Kaohsiung Inner Harbor Revitalization Urban Design, Kaohsiung City Government, Taiwan (The 1st place: AECOM Hong Kong; The 2nd place: MVRDV, Netherlands and Cosmo Urban Design Consultants, Taipei)
2. *2012. The 1st place in planning competition: *Taipei's "Manhattan" project: Waterfront revitalization strategy along Taipei Danshui River*, organized by Bureau of Urban Development, Taipei Municipal Government, 2012. (The project resulted in a new zoning policy "Eco Area Ratio (EAR)" for Taipei Municipal Government. It was written as a research article and was presented in *Wicked Problem Symposium* at UC Berkeley, October 26, 2013, and was submitted to the journal *Landscape and Urban Planning* in December 2013.)
3. *2011. Final entry, urban design competition at the City West of Zuhai, China's Special Economic Development Zone (with Guangdong Urban and Rural Planning Institute).
4. *2010. The 2nd Prize (out of 63 entries), international design competition of *Hangzhou Bay New District*, Ningbo City China (with Tongji University).
5. 2008. **The 1st prize**, international design competition of *Shuidong Bay Urban Design*, Maoming, Guangdong China (with Guangdong Urban and Rural Planning Institute).
6. 2008. Final entry, international competition of *Tangshan Core City District Urban Design* (with Sun Yet Sen University). Other final entries include EDAA (now AECOM) and AUS (Australia).
7. 2008. Final entry, international urban design competition of *Guangzhou's White Swan Waterfront Revitalization* (with Guangdong Urban and Rural Planning Institute). Other final entries include EDAA (now AECOM), Tongji University, Shanghai Urban Planning Institute, South China University of Science and Technology)

D. Presentations

(Keynote addresses in international conferences)

1. *Yang, Perry P. J. 2015. Keynote speech, Material Science for Future Urban Systems - 10KM² Near Zero Energy District (nZED), in *Covestro - Tongji Sustainable Development Forum 2015: Smart Materials in Sustainable Future Cities*, Covestro (Bayer Material Science) and Tongji University, December 16, 2015
2. *Yang, Perry P. J. 2015. Energy Resilient Urban System and its Design Problem, in *Global Carbon Project (GCP) Workshop on Tools and Indicators for Assessing Urban Resilience*, the University of Tokyo, December 7-10, 2015.
3. *Yang, Perry P. J. 2015. Keynote speech, The Agenda of Sino-U.S. Eco Urban Lab: Reconstructing ecological urbanism in the face of the next round urbanization process of China and its global impact, in *2015 International Symposium on Ecological Urban Design*, organized by Sino-U.S. Eco Urban Lab, Georgia Institute of Technology and Tongji University, 5-6 June 2015, Shanghai.
4. *Yang, Perry P. J. 2015. Energy resilient urban systems: a design perspective, in *2015 International Symposium on Ecological Urban Design*, organized by Sino-U.S. Eco Urban Lab, Georgia Institute of Technology and Tongji University, 5-6 June 2015, Shanghai.

5. *Yang, Perry P. J. 2015. Searching for research agenda of Urban Energy Systems Design, in *ICCS 2015 (International Conference on City Sciences): New architectures, infrastructures and services for future cities*, Technical University of Madrid and Tongji University, 4-5 June 2015, Shanghai
6. *Yang, Perry P. J. 2015. Design for urban metabolism: From 1950s–1970s Japanese metabolism to the post-oil city design theory, in *Global Carbon Project (GCP) Workshop and Toyota High-level Symposium on Sustainable Cities*, January 2015.
7. *Yang, Perry P. J. 2014. Featured speech “Redefining Public Realm through Reconstructing Ecology of Urbanization in China and Asian Mega Cities” at *the Big Ideas Session – Design of the Public Realm in Asian Mega-Cities* (with Gary Hack), *the 54th Annual Conference of ACSP*, Philadelphia, October 30 – November 2, 2014.
8. *Yang, Perry P. J. 2014. Featured speech “Design for ecological urban systems: Two models or ways of thinking” in *Eco Smart City Symposium*, Tongji University, Shanghai, October 24-25, 2014
9. *Yang, Perry P. J. 2014. Keynote speech “Design and Planning Workshop as an Urban Laboratory” in *iCities 2014: Workshop on Workshop*, National Cheng-Kung University, Tainan, October 14-15, 2014.
10. Yang, Perry P. J. 2014. Featured speech “EAR (Eco Area Ratio): A tool of energy performance and carbon reduction assessment for ecological urban systems” in *Shanghai Chongming Eco-Island International Forum*, Shanghai, September 24-26, 2014
11. *Yang, Perry P. J. 2011. Plenary speech “Design challenges of low energy urban systems design”, *2011 World Congress on Engineering and Technology*, Shanghai, October 2011.
12. *Yang, Perry P. J. 2010. Keynote speech, “Low Carbon Ecological City: From Evaluation, Planning to Design”, *U.S.-China Low Carbon City Mayors’ Workshop*, Beijing, July 2010.
13. *Yang, Perry P. J. 2010. Keynote speech, “Low Carbon Ecological City: From Evaluation, Planning to Design”, *Future City Forum, New Taipei City Government*, June 2010.
14. Yang, Perry P. J. 2008. Keynote speech, “Asian New Downtowns: Case Studies of Planning Decision Makings in Singapore, Taipei and Shanghai”, in *International Conference on City Competitiveness*, Chonghua University, Hsinchu, Taiwan, October 2008.
15. Yang, Perry P. J. 2007. Featured speaker, “Sustainable design and development in Asian metropolis: analytical tools, design intervention and development mechanisms”, in international conference of *Town Development: Building the New Metropolitan*, Manila, September 2007.
16. Yang, Perry P. J. 2006. Keynote speech, “Large-scale urban and landscape design as the catalyst of eco-city development”, *The Second Mega-cities International Conference: Challenges in Sustainability for Asian Cities*, Hong Kong University, Guangzhou University & CIB (International Council on Research and Innovations in Building and Construction), Guangzhou, China, December, 2006. (<http://mc2000.arch.hku.hk/mc2006/mega-speakers.html>)
17. Yang, Perry P. J. 2006. Keynote speech, “Design with the second nature: ecological development strategies in intensive urban environment”, *Kaohsiung 2006 City Forum*, Kaohsiung City Government, Taiwan, November 2006.

18. Yang, Perry P. J. 2006. Featured speaker, "Sustainable urban design in Asia", in *HPAIR 2006, The Harvard Project for Asian and International Relations 2006 Annual Academic Conference*, Singapore, August 2006. (<http://www.hpair2006.org>)
19. Yang, Perry P. J. 2005. Keynote speech, "Sport park: a catalyst of eco-city development", *The Main Stadium for 2009 World Games International Conference*, Kaohsiung City Government, Kaohsiung, Taiwan. 16 September 2005.
20. Yang, Perry P. J. 2004. Keynote speech, "Asian New Downtowns: The Urban Transformation of the Central City Areas of Singapore, Kaohsiung and Shanghai" in *the 2nd Land Research Conference*, National Cheng Chi University, Taipei, Taiwan, September 25-26, 2004.
21. Yang, Perry P. J. 2002. Keynote Speech, "Shaping Asian Urban Skylines: Reflections on Global Strategies and Policies of Singapore Downtown Design and Development", *National Planning Forum 2002*, National Cheng Kung University, Taiwan.

(Invited Conference Presentations, in addition to those listed under conference papers)

22. *Yang, Perry P. J. 2014. EAR (Eco Area Ratio): A planning approach to energy performance and carbon reduction assessment for ecological urban systems, in *Green Human Habitat Forum, organized by UNEP and CMG*, Kunming, China, November, 15, 2014.
23. *Yang, Perry P. J. 2013. Eco Area Ratio (EAR): An energy planning tool for ecological urban revitalization and transformation, in *Wicked Problem Symposium*, organized by the Journal *Landscape and Urban Planning* and College of Environmental Design, UC Berkeley, October 26, 2013.
24. *Yang, Perry P. J. 2013. Global benchmarking for low carbon urban design: A forward-looking modeling approach to Geodesign, invited presentation (by poster presentation due to time conflict), in *Geodesign Summit Europe 2013*, GeoFort, Herwijnen, Netherlands, September 19-20, 2013.
25. * Yang, Perry P. J. 2013. Global waterfront models of free economic zone: London, New York, Shanghai, Singapore and Kaohsiung, in *iCities Conference 2013*, National Cheng-Kung University, Taiwan, May 24-25, 2013.
26. *Dunham-Jones, Ellen, Yang, Perry P. J. 2013. New urbanism, landscape urbanism and beyond, in *Greenprints Conference 2013*, Atlanta, March 13-14, 2013.
27. *Yang, Perry P. J. 2012. "Cities as flows: scale, complexity and stochastic processes", in *2012 Conference on Healthy Architecture and Sustainable Environment*, National Taipei University of Technology (NTUT), Taipei, Taiwan, June 27, 2012.
28. *Yang, Perry P. J. 2012. Cities as flows: five propositions and their design challenges, in *Sustainable Urban Infrastructure Workshop*, organized by Georgia Institute of Technology and Tianjin University, Tianjin, China, June 14-16, 2012.
29. *Yang, Perry P. J. 2010. Design challenge of ecological urban systems: scale, complexity and stochastic process, in *the 5th International Conference on Urban and Regional Planning: The*

Transformation of Urban Development Model in China—Ecological, Low-carbon and Digital City, organized by Ministry of Housing and Construction of China, Chihuahua, China, June 22-23, 2010.

30. *Yang, Perry P. J. 2010. "Eco city-region planning and Eco-infrastructure for Bay Areas: Implications to PRD region", *Forum of Guangdong-Hong Kong-Macau Regional Development of Pearl River Delta (PRD)*, organized by Guangdong Provincial Government, Guangzhou, June 9-10, 2010.
31. *Yang, Perry P. J. 2010. "Ecological Urbanism: Scale, Complexity and Stochastic Processes" in *Global Alliance of Technological Universities: First workshop on Sustainable Urban Solutions* (as one of the two representatives from Georgia Tech to speak), in Shanghai Jiaotong University, May 2010.
32. Yang, Perry P. J. 2008. Asian New Downtowns: Case Studies of Planning Decision Makings in Singapore, Taipei/Kaohsiung and Shanghai, in *International Symposium on Cities Competition*, Chung-Hua University, Hsinchu, Taiwan, October 24, 2008.
33. Yang, Perry P. J. 2007. "From Taipei Eco Urban Master Plan to the Third Ecology Proposition" in *International Symposium on Planning and Design Education*, National Taiwan University, Taipei. December 29, 2007.
34. Yang, Perry P. J. 2007. "Planning the third ecology: an approach to healing ecological effects of urban transformation", in *A Quarter Century of Physical and Institutional Transformation in Urban China*, Asian Research Institute, Singapore, March 2007.
35. Yang, Perry P. J. 2005. "Revitalizing waterfronts of Singapore's Marina Bay and Kallang Basin: A reflection on urban ecological perspective", in *International Conference of Urban River: Restoration and Vision*. Kaohsiung: National Kaohsiung Ocean University, Kaohsiung, Taiwan, December 15-16, 2005.
36. Yang, Perry P. J. 2004. "Designing with nature in intensive urban environment: three urban ecological scenarios of Kaohsiung's Zao-Zai wetland park and the surrounding area of high-speed rail terminal", in *International Workshop on Eco-tech and Artificial Wetland*, National Sun Yat-Sen University, Kaohsiung, Taiwan, October 23-24, 2004.
37. Yang, Perry P. J. 2004. "Architecture and urban design education in Singapore". *International Conference on Planning Education*, National Taiwan University, July 26-27, 2004.
38. Yang, Perry P. J., Ong, Boon Lay. 2002. "Applying ecosystem concepts to the management of industrial areas." in *International Symposium on the Sustainable Management Mechanism for Industrial Parks*. Organized by Industrial Development Bureau, Ministry of Economic Affairs and National Cheng Kung University, Tainan, Taiwan. September 20, 2002.
39. Yang, Perry P. J., Wang, Hung-Kai. 2001. The Integration of Landscape Ecology and City Planning: A Case Study of Eco-Taipei 2025 Master Plan, in *2001 Symposium of Landscape Ecology and Sustainable Urban and Rural Development*, National Taiwan University, Taipei, April 1, 2001.

(Invited lectures in Universities and Governmental Agencies in the U.S.)

1. Centers of Disease Control and Prevention (CDC), "Design for Urban Metabolism", February 25, 2014.
2. University of Pennsylvania, Department of City and Regional Planning, "Cities as flows: scale, complexity and stochastic processes", February 13, 2012.
3. Northeastern Session of the Mayor's Institute on City Design, invited talk as the resource team member, "Ecological urbanism: four issues for policy makers", Boston 2009.
4. MIT, Department of Urban Studies and Planning, invited talk at the SPURS Seminar, "The third ecology proposition: an approach to sustainable design and development in five Asian urban settings", October 2007.
5. Yale University, School of Architecture and School of Forestry and Environmental Studies, invited lecture "The third ecology proposition: an approach to sustainable design and development in five Asian urban settings", October 2007.
6. Yale University, School of Forestry and Environmental Studies, invited lecture "Planning the second nature: applying landscape ecology to analysis and planning of urban environment", April 2006.

(Invited lectures in Universities and Governmental Agencies outside of the U.S.)

7. National Cheng-Chi University, invited lecture "Global Waterfront Movement from 1970s': London, Shanghai, Singapore, New York, Kaohsiung and Taipei" in *Cities for the Future Symposium*, March 11, 2014
8. Guangdong Provincial Government and Guangdong Urban Planning Institute, invited talk in *the Pearl River Delta Forum: "Eco Urban Design"* (with Professors Nancey Green Leigh, Richard Dagenhart, Bruce Stiftel), Guangzhou, China, March 22, 2014.
9. National Cheng-Chi University and Oxford University, invited lecture "Innovative Strategies of Global Waterfront Cities" in *Future of Cities Forum*, Taipei, March 11, 2014.
10. Tongji University, College of Architecture and Planning, invited lecture "Renewable Urbanism: Agenda of Eco Urban Lab in U.S. and China", in (with Professor Steve French), January 2014.
11. Shanghai Urban Planning and Design Institute, Shanghai Municipal Government, invited talk "Renewable Urbanism: Agenda of Eco Urban Lab in U.S. and China" (with Professor Steve French), January 2014.
12. Tongji University, College of Architecture and Planning, invited lecture "Global waterfront models of free economic zone: London, New York, Shanghai, Singapore and Kaohsiung", Shanghai, June 2013.
13. National Taipei University of Technology and Harvard GSD joint workshop on *Taiwanism*, invited lecture "Cities as flows: eco systems design studio 2005-2012", Taipei, March 23, 2013.

14. Tianjin University, School of Architecture, invited lecture “Cities as flows: scale, complexity and stochastic processes”, Tianjin China, June 2012.
15. National Taiwan University (NTU), Graduate Institute of Building and Planning, invited lecture “Cities as flows: scale, complexity and stochastic processes”, Taipei, June 2012.
16. National Chiao-Tung University (NCTU), School of Architecture, invited lecture “Cities as flows: scale, complexity and stochastic processes”, Hsinchu, Taiwan, June 2012.
17. Tongji University, College of Architecture and Planning, invited lecture “Low energy urban systems design: scale, complexity & stochastic process”, Shanghai, October 2011.
18. Huazhong Institute of Technology, School of Architecture and Urban Planning, invited lecture “From landscape urbanism, ecological urbanism to renewable urbanism”, Wuhan China. March 2011.
19. Taipei City Government, Urban Redevelopment Authority, invited lecture “From Biophilia to high performance landscape and urban design” in *Urban Regeneration Workshop*, Taipei, October 2010.
20. Huazhong Institute of Technology, School of Architecture and Urban Planning, invited lecture “Ecological urbanism: scale, flow and design”, Wuhan China, May 2010.
21. Tongji University, Department of Urban Planning, invited lecture “Sustainable urban form and design” (with Professor Richard Dagenhart), Shanghai, December 2009.
22. National Cheng-Kung University, Department of Urban Planning, invited lecture “Ecological urbanism: scale, flow and design”, Tainan, Taiwan, November 2009.
23. Jurong Town Corporation (JTC), Singapore Government, invited lecture “The third ecology proposition: an approach to sustainable design and development in five Asian urban settings”, Singapore, November 2007.
24. Kaohsiung City Government, invited lecture “Design with the second nature: ecological development strategies in intensive urban environment”, in *Kaohsiung 2006 City Forum*, Taiwan, November 26 –27, 2006.
25. The Asian Coalition for Architecture and Urbanism (ACAU), Singapore Workshop of Public Waterfronts in the Asian Metropolis, as a studio leader and speaker, Singapore, July 2006. (<http://www.arch.nus.edu.sg/acau/>)
26. Delft University of Technology (TU Delft), invited lecture “Knitting the city fabric” at the First International Joint Design Workshop, European Postgraduate Masters in Urbanism, Netherlands, November, 2005.
27. Taipei City Government, Urban Development Bureau, invited lecture “Three Asian models of planning decision-making: planning downtown Singapore, Kaohsiung and Shanghai”, Taipei, July 21, 2005.
28. Tainan City Government, Urban Development Bureau, invited lecture “Urban Design Experiences of Singapore Downtown Area”, in *Annual Exhibition of Community Buildings*, Tainan, Taiwan, 2002.

E. Grants and Contracts

E1. As Principal Investigator

1. * Sino- U.S. Eco Urban Lab, Georgia Tech Atlanta campus and Tongji University Shanghai campus

Agency/Company:

- Denning Global Engagement Seed Fund (Global FIRE), the Office of Vice-Provost for International Initiatives, Georgia Institute of Technology
- Dean's Office, College of Architecture, Georgia Institute of Technology
- Tongji University

Total Dollar Amount: \$205,000 (2013-2016)

- \$30,000 funded by Global FIRE, Georgia Institute of Technology
- \$15,000 funded by the Dean of College of Architecture, Georgia Institute of Technology
- \$160,000 funded by College of Architecture and Urban Planning Tongji University under Eco Urban Lab (with Co-PI Professor Wang Yi of Tongji University), 2015-2016.

Role: PI

Collaborators:

- Georgia Institute of Technology: Steven French, Alan Balfour, Richard Dagenhart, Ellen Dunham-Jones, Nancey Green Leigh, Bruce Stiffler, Subhrajit Guhathakurta. Catherine Ross, John Crittenden (faculty participating in exchange or visitation in Tongji University for activities related to Eco Urban Lab in 2013-2015)
- Tongji University: Urban design group

Period of Contract: 8/1/2013 – 6/31/2015 (Global FIRE of Georgia Institute of Technology); 6/2015 – 6/2016 (College of Architecture and Urban Planning of Tongji University)

Candidate's Share: 100%

2. *Bayer Chair Professorship at UNEP (United Nation Environment Program) – Tongji Institute of Environment for Sustainable Development (from October 2015 renamed to Covestro, previously Bayer Material Science)

Agency/Company:

- Bayer Group China (from October 2015, move to Covestro, previous Bayer Material Science) endowment to UNEP (United Nation Environment Program)– Tongji Institute of Environment for Sustainable Development

Total Dollar Amount: \$160,000 (2015),

- \$160,000 (for 2015), to be renewed in 2016 for another \$160,000

Role: PI (as the endowed chair)

Collaborators:

- Tongji University: WU Jiang, the Vice President of Tongji University

Period of Contract: 10/2014 – 12/2016

Candidate's Share: 100%

3. 2014 Shuidong Bay Waterfront City Design, Guangdong China

Agency/Company: Guangdong Urban Planning and Design Institute

Total Dollar Amount: \$40,000 (to cover travel expense of 17 Georgia Tech faculty and students to China in March 2014 and expense of the final report printing, more information in the website: <https://waterfrontcities.wordpress.com/>)
Role: PI
Collaborators: Nancey Green Leigh, Richard Dagenhart
Period of Contract: January to May 2014
Candidate's Share: 100%

4. Strategic Planning of Asian New Bay Area, Kaohsiung Taiwan

Agency/Company: Kaohsiung City Government
Total Dollar Amount: \$30,000 (to cover travel expense of 13 Georgia Tech faculty and students to Taiwan in March 2013 and the expense of the final report printing, more information in the website: <https://waterfrontcities.wordpress.com/>)
Role: PI
Collaborators: Nancey Green Leigh, Richard Dagenhart
Period of Contract: January to May 2013
Candidate's Share: 100%

5. *Low Carbon Urban Design for the City of Macau

Agency/Company: Macau Urban Planning Institute
Total Dollar Amount: \$30,000
Role: PI
Collaborators: Nil
Period of Contract: March 2011 – July 2011
Candidate's Share: 100%

6. *Assessing Solar Availability of Urban Form Using 3D GIS

Agency/Company: Georgia Tech Foundation (GT FIRE)
Total Dollar Amount: \$13,800
Role: PI
Collaborators: Nil
Period of Contract: September 2009 – May 2010
Candidate's Share: 100%

7. Asian new downtowns: urban transformation of central city areas in Singapore, Taipei and Shanghai

Agency/Company: National University of Singapore
Total Dollar Amount: \$135,600 (169,855 SGD)
Role: PI
Collaborators: Chye Kiang Heng, Jieming Zhu
Period of Contract: January 01, 2005 to June 30, 2008
Candidate's Share: 100%

8. GIS-based Design Support System in Tropical Urban Environment

Agency/Company: National University of Singapore

Total Dollar Amount: \$71,800 (89,964 SGD)
Role: PI
Collaborators: Stephen Wittkopf
Period of Contract: August 22, 2002 –May 21, 2006
Candidate's Share: 100%

E2. As Co-Principal Investigator

Provide the same information for grants and contracts on which you were co-principal investigator.

1. *Sustainable Housing through Holistic Waste Stream Management and Algal Cultivation

Agency/Company: National Science Foundation
Total Dollar Amount: \$1,644,957 (Georgia Tech portion \$800,000)
Role: Co-PI
Collaborators: PI: Ben Stuart (Ohio University), Daniel Castro and Charles Rudolph (Georgia Tech)
Period of Contract: August 22, 2012 –May 21, 2016
Candidate's Share: 33% of Georgia Tech portion

E3. As Senior Personnel or Contributor

List all funded grants and contracts on which you were not Principal or Co-Principal Investigator, but were listed as senior personnel. Proposals pending may be included, but do not include grants and contracts not funded.

N/A

E4. Proposals Submitted But Not Funded (last two years)

1. *Global benchmarking of low energy-carbon urban districts: A knowledge network for social-ecological transformability of high-density cities, submitted on May 31, 2014

Agency/Company: International Social Science Council (ISSC) and Future Earth– The Transformation to Sustainability Program
Total Dollar Amount: the first round €30,000; the second round €900,000 (€300,000 each year for over three years)
Role: PI
Collaborators: Dr Yoshiki Yamagata, Dr. Sharifi Ayyoob (National Institute of Environmental Studies, Japan), Dr Michael Batty (University College London), Dr. Jiang Wu, Dr Zhengyi Li, Dr Yi Wang (Tongji University)
Period of Contract: Stage one from July, 2014 to December 2014; Stage two from 2015 to 2018

2. *Energizing Sustainable Neighborhood Systems: a Geodesign Approach to Integrate Algae-based Renewable Energy Cultivation, Socio-Economic Feasibility and Urban Design, submitted in 2014.

Agency/Company: National Science Foundation (submitted to the 1st round internal call of Georgia Tech)

Role: PI

Collaborators: Dr. Daniel Castro (School of Building Construction) and Dr. Yongsheng Chen (School of Civil and Environmental Engineering)

3. *The Ecology of Cities: Network Flow Structure in Urban Areas, submitted in 2013

Agency/Company: INSPIRE program, National Science Foundation.

Role: Co-PI

Collaborators: PI: Dr. Marc Weissburg (School of Biology), Dr. John Crittenden (Brook Byers Institute), Dr. Subhrajit Guhathakurta (Center for GIS), Dr. Nancey Green Leigh (School of City and Regional Planning).

4. *Mitigation and Adaptation strategies for Climate Change: Mapping the relationship between urban fabric and heat islands in inner city environments, submitted in December 2012.

Agency/Company: British Council

Role: Collaborator

Collaborators: PI: Dr. Brian Stone, Dr. Subhrajit Guhathakurta

F. Other Scholarly Accomplishments

N/A

G. Societal and Policy Impacts

1. Planning the 2009 World Games Park in Kaohsiung Taiwan and its impacts:

The 2009 World Games opened in Kaohsiung in July 2009 and was **featured by CNN as an “eco-friendly venue”**. The park is located at the Tsoying District of the northern Kaohsiung, a 100 hectare site surrounded by complicated hybrid context of natural landscape, urban development and infrastructure adjacent to the high speed rail terminal of Kaohsiung City. From 2005 to 2006, the master plan was laid out by Dr. Perry Yang who was the chief designer of the master planning team as consultants for the Kaohsiung City Government after the first-prize win in the international design competition in 2005. Perry proposed the concept *landscape as pictures, landscape as flows and landscape as processes*, an urban design intervention that interweaves ecological functions of the landscape, human flows patterns and sport activities that jointly constitute the dynamics and quality of the settings. The master plan proposed a main stadium and developed its design specifications to be **the first solar-powered stadium of the world** that accommodates 40,000 permanent and 15,000 temporary spectator seats. The main stadium was later designed by a world-renown architect Toyo Ito who won the follow-up stage architecture competition for the main stadium. The World Games is part of The International World Games Association (IWGA), an organization connected to the International Olympic Committee (IOC).

From 2005 after winning the competition, Perry has been invited by the Kaohsiung City Government continuously for advising their post-Games urban development, including being a keynote speaker in the World Games Conference in 2005 and Kaohsiung City Forum in 2006, as

workshop leader of the waterfront and as a jury member for other international design competitions organized by the city. In 2013, Perry received \$30,000 sponsorship from the Kaohsiung City Government to support Georgia Tech faculty and students to conduct waterfront revitalization studio in Kaohsiung's Asian New Bay Area.

2. EAR (Eco Area Ratio): a policy impact to a green zoning regulation in the City of Taipei.

Perry won the 1st place in a planning competition: *Taipei's "Manhattan" project: Waterfront revitalization strategy along Taipei Danshui River*, organized by Urban Development Bureau of Taipei Municipal Government. It resulted in a new urban policy "EAR", an energy performance-based zoning tool. Perry was responsible for drafting the policy report that is currently under reviewed by the government. The potential policy impact of EAR to other Asian cities in the region is to be observed. Perry has been invited by a few institutions and planning agencies in the region to introduce the EAR policy, including Urban Planning Institute of Shanghai Municipal Government in January 2014 and the Ministry of Housing Development and Construction of Guangdong Provincial Government in March 2014.

V. Teaching

A. Courses Taught

List courses taught at Georgia Tech (most recent first and include the last six years). Do not include CIOS scores here.

Sem, Year	Course No.	Course Title	No. of Students
Spring 2015	CP6052/ARCH6072	Planning Studio/ Senior Architecture Studio	11
Spring 2015	CP6836C/ARCH6447	Urban Ecological Design	18
Fall 2014	CP8823PY/ARCH8823	Site Planning and Urban Simulation	11
Spring 2014	CP6052/ARCH6072	Planning Studio/ Design and Research Studio	12
Spring 2014	CP6836C/ARCH6447	Urban Ecological Design	20
Fall 2013	CP8823PY/ARCH8823	Site Planning and Urban Simulation	9
Spring 2013	CP 6052	Planning Studio	9
Spring 2013	CP6836C/ARCH8803	Urban Ecological Design	7
Fall 2012	CP8823PY/ARCH8823	Site Planning and Urban Simulation	10
Spring 2012	CP 6052/ARCH8806	Planning Studio/ Design and Research Studio	14
Spring 2012	CP 8873/ARCH8803	Urban Ecological Design	6
Fall 2011	CP8900	Urban Agriculture (Independent Study)	5
Spring 2011	CP6052/ARCH4012	Planning Studio/Architectural Design Studio IV	19
Spring 2011	CP 8873	Urban Ecological Design	6
Spring 2010	CP6052/ARCH7079	Planning Studio/Architectural Design Studio IV (Co-taught with Richard Dagenhart)	21
Spring 2010	CP 8873	Urban Ecological Design	13
Spring 2009	CP 6052	Planning Studio	4

B. Individual Student Guidance

B1. Ph.D. Students

(Ph.D. Students in Progress)

1. Steven Jige Quan, Ph.D. Candidate (August 2011 - Present)

Progress: the 3rd Ph.D. Student; passed Ph.D. comprehensive exam in April 2014.

Major Supervisor: Dr. Perry Yang; Minor Supervisor: Dr. John Crittenden

(Ph.D. Students Graduated)

2. Ze Li, Ph.D. (August 2003 – May 2007)

Ph.D. Dissertation: *Urban Redevelopment in Changshoujie, Shanghai: An Institutional Analysis.* (Department of Architecture, National University of Singapore.)

Primary Supervisor: Dr. Perry Yang; Co-Supervisor: Dr. Sun Sheng Han (University of Melbourne)

Current Position: Assistant Professor, School of Architecture, Tianjin University, China

3. Archana Sharma , Ph.D. (August 2001 – May 2007)

Ph.D. Dissertation: *Articulating the Symbiotic Construct of Eco-Industrial Park: Strengthening Through A Modified Landscape Design Strategy*

(Department of Architecture, National University of Singapore.)

Major Supervisor: Dr. Boon Lay Ong; Co-Supervisor: Dr. Perry Yang

Current Position: Assistant Professor, School of Architecture and Planning, Morgan State University, from January 2012 to Present (Previously Assistant Professor in University of Tennessee Knoxville from August 2008 to December 2011 and Lecturer at RMIT from 2005-2007)

4. Simon Yanuar Putra, Ph.D. (August 2002 – May 2006)

Ph.D. Dissertation: *A Perceptual Evaluation of Urban Space Using GIS-Based 3D Volumetric Visibility Analysis* (Department of Architecture, National University of Singapore)

Primary Supervisor: Dr. Perry Yang

Current Position: Senior GIS Specialist, Abu Dhabi Ports Company (ADPC), United Arab Emirates

5. Kuo-Wei Chiu, Ph.D. (August 2007 – January 2013)

Ph.D. Dissertation: *An Intelligible Urban Form of Structural Syncretism: Physical Transcendence and Cosmological Motif in Spatial Datum of Northeast Taiwan* (Department of Architecture, National University of Singapore)

Primary Supervisor: Dr. Johanna Widodo; Co-Supervisor: Dr Chye Kiang Heng

(A previous Ph.D. supervisee from August 2007, transferred to Dr. Widodo in 2008)

Current Position: Assistant Professor, Department of Architecture, Tunghai University, Taiwan.

B2. M.S. Students (indicate thesis option for each student)

(MCRP Students Graduated)

1. Dzung Nguyen (August 2011 – December 2012)

Option paper: *Size, shape and connectivity: The impacts of urban development on hydrological regime in Ho Chi Minh City*

Current Position: Senior planning, CPG Consultants Pte Ltd., Singapore

2. **Mike Cutno (August 2009 – May 2011)**
Option paper: *Experiencing Mu: Urban Agriculture for the Peaceful Dissolution of the City in Japan*
Current Position: Sustainability consultant, Tokyo

(MS Students Graduated)

3. **Wenjing Li (August 2012 – May 2004)**
Master thesis: *GIS-based Evaluation of Climatic Performance on Three Dimensional Urban Geometry* (MS in Architecture, Department of Architecture, National University of Singapore)
Current Position: Principal Urban Planner, Atkins, Shenzhen, China

(Master of Architecture, Master of Art in Urban Design, Master of Environmental Management Programs Dissertation Supervisees)

4. **Faysal Kabir Shuvo**, 2008, Master of Environmental Management Thesis: *Morphological And Physiological Analysis for Measuring Urban Environmental Performance* (School of Design and Environment, National University of Singapore)
5. **Shubhalaxmi Agrawal**, 2008, Master of Art in Urban Design, Dissertation in Urban Design, Department of Architecture, National University of Singapore
6. **Ong Qi Rong**, 2008, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
5. **Lew Send How**, 2008, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
6. **Tan Wan Hui**, 2007, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
7. **Chen Sin Mei**, 2007, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
8. **Sam Wei Yee**, 2007, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
9. **Pang Mung Ching**, 2007, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
10. **Andrei Johandiputra**, 2007, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
11. **Wang Mou Lin**, 2007, Master of Art in Urban Design, Dissertation, Department of Architecture, National University of Singapore
12. **Subashini Kulothungan**, 2007, Master of Art in Urban Design, Dissertation, Department of Architecture, National University of Singapore
13. **Maung Ngwe Soe**, 2007, Master of Art in Urban Design, Dissertation, Department of Architecture, National University of Singapore
14. **Chua Kwan Seng Christopher**, 2006, Master of Architecture, Dissertation, Department of Architecture, National University of Singapore
15. **Foo Siew Mun**, 2006, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
16. **Li Yu Zhou**, 2006, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
17. **Ritu Verma**, 2006, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore

18. **Sembian Vijay**, 2006, Master of Art in Urban Design MAUD Dissertation, Department of Architecture, National University of Singapore
19. **Woon Chung Yen**, 2005, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
20. **Austin Chandrasekaran**, 2005, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
21. **Hannah B M Gonzalez**, 2005, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
22. **Anandan Karunakaran**, 2004, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
23. **Bharathy Govindasamy**, 2004, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
24. **Habib Raja Mohd Nagoor**, 2004, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
25. **Chiam Ming Lee**, 2003, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
26. **Goh Wee Ping**, 2003, Master of Architecture Dissertation, Department of Architecture, National University of Singapore
27. **Rustam Tan**, 2003, Master of Architecture Dissertation, Department of Architecture, National University of Singapore. NUS
28. **Sivakumar Kumaresan**, 2003, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore
29. **Xie Yi**, 2003, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore. NUS
30. **Odita Bin Ibrahim**, 2002, Master of Art in Urban Design Dissertation, Department of Architecture, National University of Singapore

B3. Undergraduate Students

B4. Service on Thesis or Dissertation Committees

(Ph.D. Dissertation Committee Member)

1. **Fei Zhao**, Ph.D. Dissertation: *Agent-based Modeling of Commercial Building Stocks for Energy Policy and Demand Response Analysis*, Georgia Institute of Technology, 2011
2. **Deborah Middleton**, Ph.D. Dissertation: *Growth and Expansion in Post-War Urban Design Strategies: C.A. Doxiadis and the First Strategic Plan for Riyadh, Saudi Arabia (1968-1972)*, Georgia Institute of Technology, 2009.
3. **Jingnan Huang**, Department of Geography, National University of Singapore, 2008
4. **Liu Xuan**, Department of Real Estate, National University of Singapore, 2006
5. **Yeo Kang Shua**, Department of Architecture, National University of Singapore, 2006
6. **Cam Chi Ngyuen**, Department of Architecture, National University of Singapore, 2005
7. **Ji Zhang**, Department of Architecture, National University of Singapore, 2003

B5. Mentorship of Postdoctoral Fellows or Visiting Scholars

(Visiting Graduate Students)

1. **Yinan Zhou (January 2015 – December 2015)**
Lead Advisor: Professor Changfu Wu, Department of Architecture, Tongji University
Ph.D. Research Topic: Energy performance of urban district and neighborhood in Beijing and Shanghai
2. **Aaron Yulong Luo (January 2014 – December 2015)**
Lead Advisor: Dr. Jien Zhou, Department of Urban Planning, Tongji University
Ph.D. Research Topic: Performance assessment of urban redevelopment in Shanghai

(Visiting Scholars)

1. **Huifen Zou, Ph.D. (August 2014 – August 2015)**
Professor, Shenyang Architecture University, China
Research Topic: Wind simulation in urban environment.
2. **Yang Chen, Ph.D. (October 2013 – Present)**
Senior Planner, Guangdong Urban Planning and Design Institute, Guangzhou
Research Topic: Ecological urban design for waterfront environment, Maoming, Guangdong.
3. **Bin Gong (October 2013 – Present)**
Senior Planner, Guangdong Urban Planning and Design Institute, Guangzhou
Research Topic: Ecological urban design for waterfront environment, Maoming, Guangdong.

(Individual Graduate Research/ Individual Credited Research)

1. **Jiawen Wang and Yigong Zhang, MSUD students (Spring 2014)**
(To co-supervise with Professor Alan Balfour)
Research topic: Future Shanghai: A review of waterfront design and development of Shanghai since 1979
2. **Huafei Xing, MSUD students (Spring 2013)**
Research topic: How Watershed Basin Hierarchy Influences LID Strategies: Comparison between Two Urban LID Cases in Atlanta
3. **Steven Jige Quan, Ph.D. student, (Fall 2012)**
Research topic: A University to Community Net-Zero Energy Urban Agriculture System.
4. **Joseph Goodman, Ph.D. student, (Fall 2011)**
Research topic: A University to Community Net-Zero Energy Urban Agriculture System.
5. **Jong Il Park, Ph.D. (former Ph.D. student), (Fall 2010)**
Research topic: Algae powered house: planning parameters for urban, suburban and rural settings

C. Other Teaching Activities

Recognition in Teaching

2011, Perry was awarded “Thank a Teacher” certificate from The Center for the Enhancement of Teaching and Learning of Georgia Institute of Technology, in recognition of **“excellence in teaching”** and **“dedication to helping students learn in design studio”**.

New Course Development as Principal Instructor

Being the first tenure-track jointly appointed faculty in both School of City and Regional Planning and School of Architecture in the College of Architecture for *Urban Design*, Perry developed courses to bridge the two Schools driven to define urban design teaching and research scholarly in the context of globalizing urban design practices and sustainable challenges in new urban form-making that requires knowledge and skills that are connected to city planning and architecture. All courses developed and taught are cross-listed in both Schools. Three key courses were developed in Georgia Tech since 2009 to 2014:

CP6052+ARCH6072	International Urban Design Studio (Applied Planning Studio for MCRP Program and Design and Research Studio for MArch Program)
CP6052+ARCH6447	Urban Ecological Design
CP8823 PY+ARCH8823 PY	Site Planning and Urban Simulation

1. **International Urban Design Studio (2009 – Present)**, to co-teach with Richard Dagenhart in 2009 and 2010

Faculty led Study Abroad Program approved by Office of International Education (OIE), Georgia Institute of Technology

Course Number: CP6052+ARCH6072

The International Urban Design Studio is an on-going initiative in the College of Architecture’s international programs and projects. This program provides an ongoing platform for faculty and students in the College of Architecture and collaborating schools and institutions abroad, to develop common intellectual interests and explore collaborative teaching, learning and research opportunities, especially in the area of sustainable urban design. The primary objective of the International Urban Design Studio is to engage graduate students in the College of Architecture in interdisciplinary, collaborative and real-world experiences in support of global professional practices in urban design, architecture and planning. In addition, the intention is to focus the studios on problems that are part of, or lead to, future research initiatives.

Urban Design provides the disciplinary and interdisciplinary platform for the studio, bringing together students and faculty in Urban Design, the Master of City and Regional Planning Program and the Master of Architecture Program. The studios are part of the professional curricula in the Master of City and Regional Planning, the Master of Architecture or the Master of Science in Urban Design. The studios gain faculty approval from the faculty of the related Schools. The COA International Urban Design Studio began in 2009 and occurs intermittently as opportunities arise with universities and institutions abroad. Each studio is designed for its specific setting, the project situation and the host institutions objectives.

- December 2009 and Spring 2010, *Shanghai Pudong Waterfront Revitalization* (with Dagenhart), joint studio with Tongji University.

- Spring 2011, *Ecological Urbanism Studio: global benchmarking for low carbon urban design*, project selected and exhibited at the 100th ACSA (Association of Collegiate Schools of Architecture) Annual Meeting, March 2012, MIT and Boston. (Georgia Tech received \$30,000 sponsorship from Macau Urban Planning Institute to support the research.)
- Spring 2012, *Agrarian Urbanism Studio: A low energy agriculture system in Wheat Street Garden at Atlanta*, with Georgia Tech's School of Biology, Arkfab group and Truly Living Well. (*This was the only studio run locally at Atlanta.)
- Spring 2013, *Waterfront Revitalization Studio: Asian New Bay Area in Kaohsiung* (The studio received \$30,000 sponsorship from Kaohsiung City Government, Taiwan to cover travel expenses of 3 faculty and 9 students to travel to Taiwan for site visit and presentation in the local government.)
- Spring 2014, *Waterfront Revitalization Studio: Shuidong Bay in Maoming, Guangdong China* (The studio received \$40,000 sponsorship from Maoming City Government and Guangdong Urban Planning and Design Institute, China to cover travel expenses of 4 faculty and 13 students to travel to China for site visit and presentation in the local government.)
- Spring 2015, Shanghai Chongming Eco Island Studio: Design for Urban Metabolism, a joint studio with College of Architecture and Urban Planning and School of Construction Management of Tongji University (The studio received support of local accommodation from Tongji University.)
- Spring 2016, near Zero Energy District Studio, Disney in Pudong Shanghai. (It's a ongoing studio project in collaboration with Disney Research China, a laboratory of Walt Disney Imagineering in Shanghai, as well as Tongji University and Covestro (Previous Bayer Material Science). An international joint workshop has been scheduled in March 19-27, 2016 this year in Shanghai for students to conduct fieldwork and make presentation to local stakeholders.)

More details can be found in the Studio website: <https://waterfrontcities.wordpress.com/>

(2011, Awarded "Thank a Teacher" certificate from The Center for the Enhancement of Teaching and Learning of Georgia Institute of Technology, in recognition of "excellence in teaching" and "dedication to helping students learn in design studio".)

2. **Urban Ecological Design (2010 – Present),**

Course Number: CP6052+ARCH6447

The new course engages contemporary issues of urban ecology and its articulation to design. The new commitment of the co-habitation of nature and built environment has drawn attentions of urban designers, planners and architects. The discourses of urban sustainability have to move away from social sufficiency, ecological efficiency to ecosystem compatibility by linking the forms and flows of urban, industrial and natural systems. The new challenges of urban ecological issue require design and planning professionals to deal with how urban environmental spaces could be analyzed, designed, managed, evaluated, represented and changed for responding to the cutting-edge sustainable issues. Divided by two main categories, Spatial Form and Ecological Flow, a series of lecture covers the theoretical arguments and current practices of sustainable urban design.

3. **Site Planning and Urban Simulation (2012 – Present)**

Course Number: CP8823 PY+ARCH8823 PY

Site planning has been seen as one of basic professional skills for city planners, urban designers and architects. There is a strong intellectual legacy from the works of Kevin Lynch, Donald

Appleyard, Carl Steinitz and Gary Hack who defined site planning as “an art of arranging structure on the land and shaping the spaces between” (Lynch and Hack, 1983), a system approach to planning urban and natural settings over a defined spatial and temporal environment in context. The course introduces literature in site planning and the foundation of skill development through a series of workshops. It provides visual-based analytical techniques and related simulation tools based on dimensions of representation, analysis and design. The synthesis of the three constitutes a method for engaging site and urban ecological systems across scales from building lots, neighborhoods, cities to regional spaces. The course also aims for extending the knowledge and skill set of site planning to new challenges of post-oil city by integrating emerging technologies and performance-based design tools for mapping ecological flows in cities including energy, carbon, material, water, human movement and informational flows across territories and spatial scales over time. The representation, analysis and design of sites and urban ecological systems are to be driven by questions behind the shaping of high performance, renewable and resilient urban environment, focusing on urban ecology, renewable energy, carbon offset strategies and the making of sustainable site and urban systems.

VI. Service

A. Professional Contributions

Editorial Board Member

1. Advances in Urban Planning and Development (AUPD), 2013 - Present
2. Journal of Architectural Engineering Technology, 2012 – Present
3. Modern Urban Research, (in Chinese language, core journal), 2005 - Present
4. Progress in Industrial Ecology - An International Journal, 2003 - Present

Conference, Workshop Chair and Organizer

(As Conference Organizer)

1. Co-chair of Organizing Committee (with Qifeng Yuan, Dr. Nancey Green Leigh), *the 9th Symposium of the International Urban Planning and Environment Association (UPE9): Rapid Urbanization, Global Recession and Climate Change*, Guangzhou, China
2. Chair of the Organizing Committee, *the 3rd Great Asian Streets Symposium (GASS): Asian Urban Design Forum*, Singapore, December, 2004.

(As Session Chair in Conferences or Symposiums)

3. Program track chair, Low-carbon Cities and Urban Energy systems, *Applied Energy Symposium and Summit 2015 (CUE2015)*, Nov 15-17, 2015, Fuzhou, China
4. Session chair and panel organizer, *Urban Energy Systems Design, 2015 International Conference on Applied Energy (ICAE)*, March 28-31, 2015, Abu Dhabi
5. Co-Chair of the Conclusion Session (With Dr. Yamagata), *Global Carbon Project (GCP) Workshop on Tools and Indicators for Assessing Urban Resilience*, the University of Tokyo, December 7-10, 2015.
6. Co-chair of the special session (With Dr. Yamagata) “Energy resilient urban planning” in *2014 International Conference of Applied Energy (ICAP)*, meeting to be in Taipei, March 31 – June 2, 2014.

7. Session chair, *2014 Construction Research Congress*, Georgia Institute of Technology, Atlanta, May 19-21, 2014.
8. Session chair, *Wicked Problem Symposium*, organized by the Journal *Landscape and Urban Planning* and College of Environmental Design, UC Berkeley, October 26, 2013.
9. Session chair, *the 8th Symposium of the International Urban Planning and Environment Association (UPE8): Parallel Patterns of Urban Growth and Decline: Sustainability Issues and Challenges for Spatial Planning in 21st Century Cities and Regions*, University of Kaiserslautern, Germany, March 23-26, 2009.

Professional Organization Service and Affiliation

1. International Scientific Committee Member, *International Conference on Applied Energy (ICAE)*, 2015 to Present.
2. Board Member, *International Urban Planning and Environment Association (UPE)*, 2007 to Present.
3. Member, the *Pacific Rim Community Design Network*, 2003 to Present.
4. Acting member of steering committee, *the Habitat Partner University Initiative* at UN Habitat London meeting (to represent GPEAN from May to July 2011).
5. Resource team member, Northeastern Session of *the Mayor's Institute on City Design*, Boston, October 7-9, 2009.

Invited Jury Member for Urban Design Competitions

1. October 2012, invited jury member, International Competition of Pedestrian Bridge Design for Kaohsiung Weiwuying Park, Taiwan

B. Public and Community Service

1. Jury member, 2012 Development of Excellence Award, Atlanta Regional Commission September 2012,
2. Member of LCI (Livable Centers Initiative) Review Committee, Atlanta Regional Commission, 2010.

C. Institute Contributions

Georgia Institute of Technology

1. **Lead, Georgia Tech – Tongji Sino U.S. Eco Urban Lab in Shanghai (January 2014 to Present):**
From 2013, Perry helped Georgia Tech and Tongji University to build the Sino- U.S. Laboratory for Ecological Urban Design (or the Eco Urban Lab) in both Shanghai and Atlanta, and served as the Co-Director from Georgia Tech side. In June 2013, the Memorandum of Understanding (MOU) of the Eco Urban Lab was signed by the College of Architecture, Georgia Institute of Technology and the College of Architecture and Urban Planning, Tongji University. In January 2014, the Eco Urban Lab was launched in Shanghai. By 2014-2015, Georgia Tech is expected to receive \$180,000 or above equivalent value of funding support from Tongji University for faculty exchange and post-doctoral fellowship for the Joint Lab.
2. **Lead, Georgia Tech – Tongji University exchange program for degrees (2011 – Present):**
From 2012, Perry led the process to build the Georgia Tech – Tongji exchange program for

degrees (with the former Dean of COA Alan Balfour and Acting School Chair of SOA Richard Dagenhart). Students from Georgia Tech's Master of Architecture Program and Master of City and Regional Planning Program are eligible for applying Tongji University's Master of Architecture Program and Master of Urban Planning for degree and reduce the originally five-semester degree program to two semesters within one academic year. Both degrees from Tongji University are top-ranked and accredited programs in China.

3. **Member of the Institute's International Committee (Globalization Task Force and International Plan Task Force)**, Chaired by Vice Provost for International Initiatives of the Georgia Institute of Technology, to contribute to the global strategy in Georgia Tech's Strategic Planning process, 2010- 2012.

College of Architecture

1. Coordinator, International China Summer Internship: From 2009 to 2015, Perry has established China Summer Internship for students from School of City and Regional Planning and School of Architecture Georgia to work as interns in the Guangdong Urban Planning and Design Institute (GDUPI) in the City of Guangzhou. Seventeen Georgia Tech students participated in the program in the past seven years (from 2009 to Present).
2. Advisory Committee, College of Architecture (from 2012 to 2015)
3. Diversity Committee, College of Architecture (from 2012 to 2013)
4. Exhibition Committee, College of Architecture (from 2014 - Present)
5. Member of Strategic Planning Committee of Expanding our Footprint: National, International and Online, chaired by Michael Gambles, College of Architecture (from 2014- Present).

School of City and Regional Planning

1. Member of Executive Committee (2014-Present)
2. Member of Committee in international embrace and internal linkage (Chaired by Subhrajit Guhathakurta) (2012-2013)
3. Coordinator, Dual Degrees Program of Master of Architecture and Master of City and Regional Program. (from 2013 to 2014)
4. Master of City and Regional Planning Program Committee (Chaired by Brian Stone) (2012-2013)

School of Architecture

5. Master of Science of Urban Design Admission Committee, chaired by Ellen Dunham-Jones (from 2012- Present).
6. Coordinator, Dual Degrees Program of Master of Architecture and Master of City and Regional Program. (from 2013 to 2014)