

## **2017 Smart City Technology Workshop: Digital Commons Lujiazui** - Public Domain and Urban Sensing in the Context of Post-Cyberspace

Organizers: Eco Urban Lab, Tongji University and Georgia Institute of Technology;  
Covestro- UNEP-Tongji Sustainable Development Chair Professorship  
Venue: Tongji University, Shanghai; Time: August 11, 2017

### **Introduction**

The emerging technologies including IoT are changing architecture, urban design and city planning professions in the post-cyber space era. Unlike cyberspace, a tabula rasa of virtual reality, the IoT and pervasive computing create a new paradigm of place making by integrating the physical and digital world, in which proximity, urban context, and physical form of cities are crucial. The design of smart city consists of smart homes, urban spaces and infrastructure systems that are situational, responsive and resilient to future changes.

“Repairing Lujiazui” is an experimental project proposed in the context of Shanghai’s new policy of urban revitalization. Innovative urban design is to be conducted through examining the scale, functions and forms of the downtown urban space. “Digital Commons Lujiazui” explores how digital and sensing technologies and smart materials can be applied to analyzing, simulating and embedding augmented environment to cities, and question contemporary meanings of public space and how they fundamentally change human sensing and experiencing cities.

### **2017 Smart City Technology Workshop**

The workshop provides technical training and conceptual development on IoT sensing technologies, mobility and pedestrian simulation, 3D GIS visual and urban sensing modeling, urban lighting and smart material prototyping...etc. Invited speakers and workshop leaders from Singapore, Japan, the U.S. and China. Key participants of the workshop include the follows (Invitation continues):

- Perry Yang, Eco Urban Lab, Georgia Institute of Technology and Tongji University
- Cai Yongjie, Department of Architecture and Eco Urban Lab, Tongji University:
- Hao Luoxi, Light Environmental Laboratory and Center for Built Environment Technology, Tongji University
- Yoshiki Yamagata, National Institute for Environmental Studies of Japan, Global Carbon Project
- Kanae Matsui, Tokyo Denki University and Keio University
- Cheryl Chi, Disney Research China
- Ellen Do, Georgia Institute of Technology and CUTE Center of National University of Singapore

- Yen Ching-Chuan, CUTE Center, National University of Singapore
- Steven Jige Quan, Seoul National University

Venue: Tongji University, Shanghai

Time: August 10, 2017

### Tentative Program

8:00 - 8:30	Welcome Coffee
8:30 - 9:00	Introduction of the Workshop – Perry Yang
9:00 - 9:20	Lujiazui Repair Project – Cai Yongjie
9:20 - 9:40	Urban Lighting for a Polycentric Shanghai – Hao Luoxi
9:40 - 10:00	Digital Commons: A Concept of Smart City – Perry Yang
10:00 - 10:20	Smart Mobility – Yoshiki Yamagata
10:20 - 10:40	Break
10:40 - 11:00	Interactive Design for Smart City – Ellen Do
11:00 - 11:20	Interdisciplinary Design Collaboration – Yen Ching-Chuan
11:20 - 11:40	Co-design model for Digital City – Cheryl Chi
11:40 - 12:30	Panel Discussion on Lujiazui Experiment: Goal Setting
<b>14:00 - 17:00</b>	<b>Internet of Things workshop –</b>
	Workshop leaders: Kanae Matsui and Ellen Do
17:00 - 18:00	Presentation and Concluding Remarks

## 2017 智慧城市技术工作坊 - 陆家嘴数位公共空间计划

### - 后网路时代的公共领域及城市感知

主办：生态城市设计国际联合实验室, 科思创 - 同济大学可持续发展教席

时间：2017年8月10日；地点：同济大学, 上海

后网路时代的新科技如物联网等正快速改变建筑，城市设计及规划。在互联网的世界，虚拟空间从平地而起。物联网及普适计算整合物质及虚拟空间，则带来场所塑造的新典范，其中邻近性，城市脉络及空间形态扮演了极为关键的作用。智慧城市系统的设计，包含智能建筑及智慧城市空间及基础设施，都将成为情境导向，随势移转，及具备适应未来变化的韧性力。

陆家嘴修复计划的提出，面向上海的城市更新政策。从城市核心区的尺度，功能及形态等层面着手进行创新设计。陆家嘴数位公共空间计划，进一步应用数位传感技

术来分析，模拟，及置入扩增实境及智能材料于城市，探讨后网路时代公共空间的  
意义及如何根本的改变了人们的城市感知经验。