UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

DREMES

The Dynamic Research Enterprise for Multidisciplinary Engineering Sciences
ZJU-UIUC Joint Research Center

ZHEJIANG UNIVERSITY

Center for Infrastructure Resilience in Cities as Livable Environments
CIRCLE

CIRCLE
Distinguished Lecture Series

Dr. Der-Horng Lee

A Critical Path in Singapore's Movement Toward a Future Sustainable Liveable Smart City – the Application of Evidence-Based Practice Approach upon Mobility Policy

ABSTRACT: Singapore is one of the city-states in the world with an acclaimed transport system that provides its residents with a variety of accessibility and mobility options. Integrated land-use and transportation planning had been playing a vital role in keeping it rejuvenated in accordance with increasing travel demand. Due to limited land availability coupled with increasing population density, public transportation continues to play as a major mode of commuting. Despite adequate quantity of supply of mobility infrastructure and efficient operation of public transport, private car ownership is still high in Singapore. The nation is moving towards a car-lite future with an aim of reducing reliance on private vehicles and hence, progresses towards creating a more sustainable and liveable environment that benefits the city and its communities in several ways, including mobility. The presentation will cover items such as: introducing Singapore's move towards a low-carbon and car-lite society, discussing innovative mobility and land development solutions at a town-based level and sharing some key techniques adopted in investigating a holistic mobility planning. The success of Singapore's low-carbon and car-lite mobility policy planning is heavily attributed to the subscription of evidence-based practice approach which relies on data analytics and scientific modeling results.

BIO: Professor Der-Horng Lee is helmed by the 'Qiushi' Chair Professorship of Zhejiang University (ZJU), China. He is currently the Dean of Zhejiang University – University of Illinois at Urbana-Champaign Institute. Prior to ZJU, Professor Lee was a tenured professor at the Department of Civil and Environmental Engineering, National University of Singapore (NUS). He is an elected Fellow of Academy of Engineering Singapore (SAEng). Professor Lee's primarily research areas include Intelligent Transportation Systems (ITS), Intelligent Port Logistics Systems, Sustainable Liveable Smart City. Professor Lee was graduated with his PhD degree from the University of Illinois in 1996. He was an Honoree of 2002 TR100 Award (renamed to TR35 in 2005) by MIT's Technology Review. A TEDx speaker, Professor Lee has been extensively quoted and frequently interviewed by local and international media with more than 500 interviews of his views and proposals on technology, urban mobility, urban policies, infrastructure development, etc. Professor Lee is listed in "World's Top 2% Scientists" published by Stanford University, USA. Professor Lee was received by Chinese President Xi Jinping in Beijing in October 2019.

CIRCLE: The Center for Infrastructure Resilience in Cities as Livable Environments is one of three research themes supported by the joint Dynamic Research Enterprise for Multidisciplinary Engineering Sciences (DREMES), established between the University of Illinois at Urbana-Champaign (UIUC) and Zhejiang University (ZJU). The CIRCLE Distinguished Lecture Series is intended to provide opportunities for faculty and students to meet and interact with internationally renowned experts in the field.

To register send an email to circle@intl.zju.edu.cn or scan the QR code. Registration is free.

13 December 2022 on zoom | **at 8AM CDT - 10PM Beijing Time**

GET YOUR SEAT
SCAN TO REGISTER!
circle.cee.illinois.edu

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

DREMES

The Dynamic Research Enterprise for Multidisciplinary Engineering Sciences
ZJU-UIUC Joint Research Center

浙江大學 ZHEJIANG UNIVERSITY

CIRCLE
杰 出 讲 座 系 列

Dr. Der-Horng Lee

新加坡迈向未来可持续宜居智慧城市的必由之路 — 循证实践法在交通政策中的应用

摘要：新加坡是世界上拥有广受赞誉的交通系统的城市国家之一，为其居民提供了各种便利性和流动性选择。土地使用和交通综合规划在保持新加坡的活力方面发挥了重要作用，以满足日益增长的旅行需求。由于土地供应有限，加上人口密度增加，公共交通继续作为主要的通勤方式。尽管有足够数量的交通基础设施和有效的公共交通运营，新加坡的私人汽车拥有率仍然很高。新加坡正在朝着轻车熟路的方向发展，目的是减少对私家车的依赖，从而在创造一个更加可持续和宜居的环境方面取得进展，使城市和社区在多个方面受益。然而，将整个城市转变为低碳城市显然不是一个容易实现的举措，因此必须寻求全面的和新的城市交通解决方案。报告内容包括：新加坡迈向轻车熟路社会所采取的举措，讨论城市组团层面的创新交通解决方案，并分享在研究整体交通规划中采用的一些关键技术。新加坡低碳和轻车熟路出行规划政策的成功，很大程度上归功于仰赖精准有效的数据分析，以及采用科学建模结果的循证实践法的认可。

简介：李德纮院士为浙江大学求是讲席教授，浙江大学–伊利诺伊大学厄巴纳香槟校区联合学院院长，美国伊利诺伊大学博士，新加坡工程院院士、执行委员会委员、交通学部主任。于2021年加入浙江大学之前，李院士为新加坡国立大学土木暨环境工程学系终身长聘教授，并担任新加坡国立大学校务委员。李院士的主要研究领域包括智慧交通系统，智慧港航物流系统，可持续宜居智慧城市。所从事的研究课题并且涵盖综合一体化交通系统，循证实践交通政策，交通与土地使用总合规划，公共交通系统与运营设计，高信度交通仿真，人工智能与大数据在城市出行的研究，机场规划与管理等。李院士同时为新加坡工程师学会会士，新加坡首批注册特许交通专业工程师暨审查委员，并曾任新加坡国立大学与新加坡交通部陆路交通管理局联合交通研究中心主任。作为一位TEDx　讲者，李院士曾先后接受包括中央电视台在内的中外媒体超过五百次以上的报道与采访。李院士于2002年获美国麻省理工学院所发行《科技评论》杂志，评选为年度“全球 35 岁以下科技创新 100 人”(TR100, 该奖项于2005年更名为TR35)，并且名列由美国斯坦福大学所发布的全球前2%顶尖科学家榜单。李德纮院士在2019年10月于北京受到中国国家主席习近平的接见。

CIRCLE：宜居城市基础设施韧性中心是伊利诺伊大学厄巴纳–香槟分校（UIUC）格兰杰工程学院和浙江大学 (ZJU) 建立的三个联合研究中心之一。 CIRCLE 杰出讲座系列旨在为教师和学生提供与该领域国际知名专家会面和互动的机会。

发送邮件至circle@intl.zju.edu.cn或扫描二维码报名，免费注册。

扫描二维码立刻报名
circle.cee.illinois.edu

2022年12月13日 zoom | 北京时间：晚上10点

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

DREMES

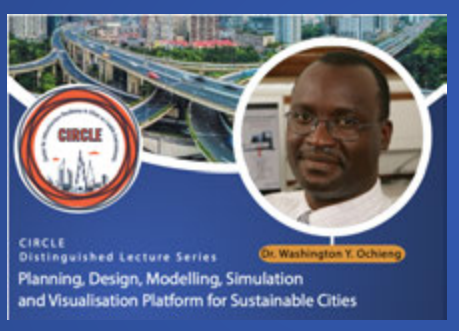
The Dynamic Research Enterprise for Multidisciplinary Engineering Sciences

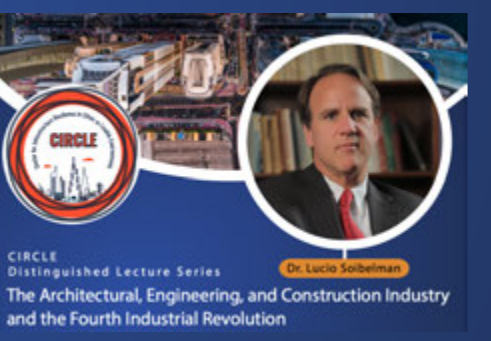
ZJU-UIUC Joint Research Center

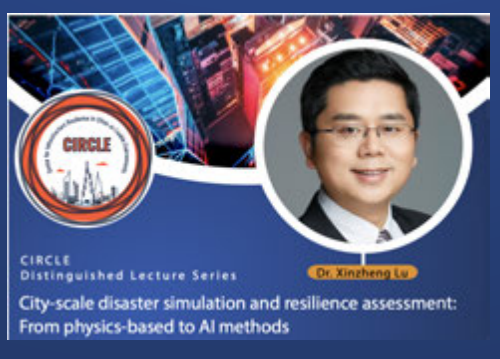
浙江大學 ZHEJIANG UNIVERSITY

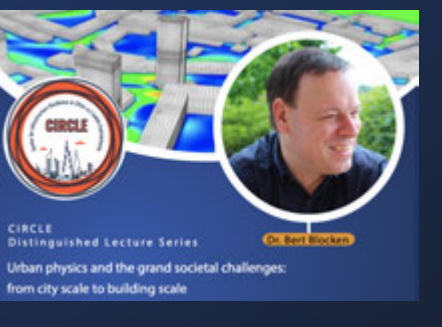
Do you want to watch our previous CIRCLE Distinguished Lectures?

Scan the QR code or click on the link!









https://circle.cee.illinois.edu/circle-distinguished-lecture-series/