





CIRCLE Distinguished Lecture Series

Dr. Washington Y. Ochieng

Planning, Design, Modelling, Simulation and Visualisation Platform for Sustainable Cities

Abstract: Cities around the world are under immense pressure from various economic, social and environmental challenges. In many cities, the population is predicted to grow significantly over the next decades. This will not only intensify the struggle to find space for residential, commercial and public use but also put additional strain on already congested and ageing infrastructure systems. At the same time, new technological innovations are emerging on the horizon, for example, connected and autonomous vehicles. In order to address these challenges, Professor Ochieng will explore the need for a parametric platform for integrated planning, design and visualisation of sustainable smart cities.

Bio: Professor Washington Yotto Ochieng, FREng, is the Head of the Department of Civil and Environmental Engineering at Imperial College London, and Chair in Positioning and Navigation Systems and is a Fellow of the Royal Academy of Engineering (RAEng). He is also the Senior Security Science Fellow at the Institute for Security Science and Technology (ISST) at Imperial College London. Formerly, he was the Head of the Centre for Transport Studies and Co-Director of the ISST at Imperial. He is the current Vice President of the Royal Institute of Navigation (RIN). Prof. Ochieng has undertaken award-winning research in critical infrastructure resilience, user-centric mobility and positioning, navigation and timing (PNT) systems. Examples of his works include the design of positioning and navigation systems (including Europe's EGNOS and GALILEO systems) for land, sea, air and space applications; Air Traffic Management (ATM) and Intelligent Transport Systems (ITS). In 2019, he received the Harold Spencer-Jones Gold Medal (the highest award from the RIN) in recognition of his 'extensive valued advice to policy makers and for pioneering research in safety-critical navigation and positioning systems'.

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.





可持续城市的规划、设计、建模和可视化平台

摘要:当今世界各地的城市都面临着各种经济、社会和环境带来的巨大压力和挑战。预计 许多城市人口将在未来几十年大幅增长。这不仅会加剧住宅、商业和公共场所的用地矛盾 ,而且还会给本已饱和和老化的基础设施系统带来额外的负担。与此同时,各类新的技术 创新正在不断涌现,例如:人工智能、物联网、无人驾驶。为了解决这些挑战,Ochieng 教授将探讨参数化平台对可持续智慧城市的综合规划、设计和可视化的必要性。

简介: 华盛顿.欧强(Washington Ochieng)教授是世界顶级专家、英国帝国理工学院土木 和环境工程系系主任,英国皇家工程院院士,中国国家千人计划专家。他在智能交通系统 (ITS),地理信息工程(GIS),导航定位和空中交通管理(ATM)领域有着重要和持 续的影响力。2019年Ochieng教授荣获英国皇家导航学会最高奖 'Harold Spencer Jones' 奖,英国女王伊丽莎白二世为其授予荣誉勋章。Ochieng教授在业内享有极高声誉,被业 内顶级期刊GPS World评为全球受关注的高级专家。在智能交通领域,Ochieng教授关于 利用空间信息、卫星导航和航位推算,在交通服务的无缝定位方面做出了原创性的创新研 究,他的论文赢得了在地图匹配领域引用次数最多的地位。他对多个重要国际项目做出突 出贡献,包括:欧洲的卫星导航系统和增强系统(GALILEO/EGNOS)设计、单一欧洲天 空(Single European Sky)倡议以及导航技术在智能交通中的应用。Ochieng教授是国际著 名SCI期刊《GPS SOLUTION》,《JOURNAL OF NAVIGATION》,《地理信息工程》编委,2007 年担任智能交通系统期刊智能车辆导航系统特约编辑。他共撰写及合作撰写了超过250篇 论文报告,获得多个国家与国际奖项。

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。









Do you want to watch our previous CIRCLE Distinguished Lectures?

Scan the QR code or click on the link!









