

8WCSCM Mini Symposium (MS-2) Smart Cities and Smart Tourism

Tuesday, June 7 13:00 – 14:30, Auditorium (Room 101)

Synopsis: Smart Cities are interconnected complex systems including components such as people, built environment, operations, economic and social-organizational aspects. Smart cities will combine sensing, communications, and management technologies to create urban environments that are adaptable, connected, able to be monitored at any given time and focused on the achievement of a specific set of objectives. As technology continues to transform the infrastructure sector, artificial intelligence, sensing, the Internet of Things, and various in-sight era technologies provide emergent opportunities for smart cities to improve quality of lives of people, improve efficiency in operations and contribute to “green communities”. New generation of smart cities can take advantage of such developments while recognizing that natural, technological, and human-caused hazards, pandemics can take a high toll on communities, costing in lives, livelihoods and quality of life if such disaster risks are not considered and managed. Some of the major cities such as New York, Las Vegas, Orlando in the USA also receive large number of visitors/tourists contributing greatly to local and state economies. Tourism businesses may need to prepare challenges such revisioning, leading, coordinating, and planning tourism destinations for destination marketing and management organizations in a smart city. Therefore, smart tourism is a part of the interconnected smart city system.

Given the abovementioned challenges, how should different stakeholders for such cities address these complex systems issues? What and how emergent technologies could facilitate the transition towards a resilient, economically and socially vibrant smart city with smart tourism? The *Smart Cities and Smart Tourism Mini-symposium* will gather experts with backgrounds in built infrastructure, novel technologies, tourism industry to discuss the opportunities challenges of smart city and smart tourism development and unpack existing technological trends and advances. The expert panelist listed below will bring their own perspectives to Smart City concepts and implementations especially considering major cities have to consider smart tourism as an integral part of the economy, people, and operations along with built environment and advanced technologies.

Panelists (tentative):

- **Dr. Andrew Smyth**, Professor of Civil Engineering & Chair of the Smart Cities Center, Columbia University, New York ([Link](#))
- **Dr. Therese McAllister**, Community Resilience Group Leader, National Institute of Standards and Technology ([Link](#))
- **Ms. Mital Hall**, PMP, LEEd AB O+M, CC-P, Vice President, ecoPreserve Inc. ([Link](#))
- **Mr. Jeff Benavides** Chief Sustainability & Resilience Officer at Orange County, Orange County, Florida ([Link](#))



Moderators:

- **Dr. Arthur Huang**, Assistant Professor, Rosen College of Hospitality Management, University of Central Florida ([Link](#))
- **Dr. Necati Catbas**, Professor, College of Engineering and Computer Science, University of Central Florida ([Link](#))

Panelists

			
Andrew Smyth	Therese McAllister	Mital Hall	Jeff Benavides

Moderator

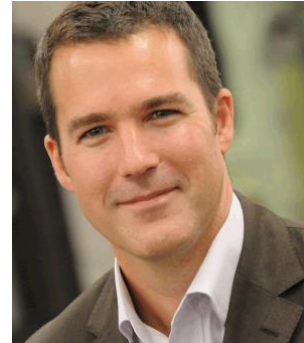
	
Arthur Huang	Necati Catbas

Panelists Bio

Andrew Smyth, Ph.D.

Professor of Civil Engineering & Chair of the Smart Cities Center
Columbia University, New York

Andrew Smyth specializes in structural health monitoring, using sensor information to determine the condition of critical infrastructure. Recently his interest in sensor network monitoring has expanded to large fleets of vehicles in urban environments. Smyth is the chair of the Smart Cities Center at Columbia University's Data Science Institute. Smyth has been involved with the sensor instrumentation and vibration analysis and remote monitoring of a large number of iconic long-span bridges and landmark buildings and museums. His research interests include the development of data fusion and system identification algorithms to derive maximum information from large heterogeneous sensor networks monitoring dynamical systems, nonlinear system dynamical modeling and simulation, and natural hazards risk assessment.



Therese McAllister, Ph.D.

Community Resilience Group Leader, National Institute of Standards and
Technology

Dr. Therese McAllister is the Community Resilience Group Leader in the Materials and Structural Systems Research Division of the Engineering Laboratory (EL) at the National Institute of Standards and Technology (NIST). She is also the Technical Point of Contact for the NIST funded Center of Excellence, Center for Risk-Based Community Resilience Planning led by Colorado State University. Dr. McAllister conducts research on community resilience, with a focus on the integrated performance of physical infrastructure systems and social and economic systems. She has expertise in structural reliability, risk assessment, and failure analysis of buildings and infrastructure systems. She conducted detailed studies of the WTC disaster, Hurricane Katrina flooding in New Orleans, and Hurricane Sandy flood effects on infrastructure systems. Prior to joining NIST, she conducted forensic studies of structural failures.



Mital Hall, IMP, LEED AP O+M, CC
Vice President, ecoPreserve

Mital Hall, PMP, LEED AP O+M, CC-P has 20 years of experience in sustainable development. As Vice President for ecoPreserve, Mital oversees the company's strategic growth. Her expertise lies in strategic planning, policy development and implementation of programs that focus on high efficiency, low impact building design and operations, impacting over 50 million sq. ft of space and through the management of small and multi-millions dollar programs. Mital is a published author and currently serves on US Green Building Council – Central Florida Market Leadership Chair and Florida State Market Leadership.



Mr. Jeff Benavides
Chief Sustainability & Resilience Officer
Orange County Government, Florida

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Panel Moderators

Arthur Huang, Ph.D., LEED AP BD+C
Assistant Professor, Rosen College of Hospitality Management
University of Central Florida

Dr. Arthur Huang has an interdisciplinary background in engineering and tourism research. He is affiliated with both Rosen College of Hospitality Management and College of Engineering and Computer Science working on smart cities and smart tourism. His research interests include smart tourism, artificial intelligence and its applications in the tourism industry, dynamic and data-driven modeling of destination planning and management, and sustainability. Dr. Huang has led multiple federally- and state-funded projects. Dr. Huang testified before the Florida House of Representatives on the tourism workforce development in 2019. Dr. Huang has delivered invited talks at MIT Sensable City Lab, City College of New York, University of Arizona, Northeastern University, State University of New York at Buffalo, and Michigan Technological University.



Necati Catbas, Ph.D., PE
Professor of Civil, Environmental and Construction Engineering
College of Engineering and Computer Science
University of Central Florida

Dr. F. Necati Catbas is an educator and a researcher currently serving as a full professor at the University of Central Florida. He teaches undergraduate and graduate level courses in the area of structural engineering, bridge engineering, structural dynamics, finite element analysis, structural health monitoring and advanced engineering topics. Prof. Catbas has several publications and research projects on the development, integration, and implementation of sensing, information, modeling and simulation technologies, parametric and nonparametric structural identification, image-based technologies for structures such as bridges, buildings, aerospace structures and components, lifelines, and stadium structures. Dr. Catbas and his team focus on theoretical, experimental, and applied aspects of structural identification, structural health monitoring, nondestructive evaluation, and condition assessment of structural systems. Dr. Catbas is the founding director of Civil Infrastructure Technologies for Resilience and Safety (CITRS)

