**IACIP Webinar (August 7th [9:30 PM China] / [9:30 AM EST USA], 2022)**

**Non-Destructive Testing and Evaluation (NDT&E) of Asphalt Concrete (AC) Pavement During Construction and Service: Principles, Current Practices, and Future Vision**

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**Abstract:** Transportation infrastructures require effective and timely assessments to ensure serviceability. Non-destructive testing and evaluation (NDT&E) techniques have been implemented to provide non-invasive and reliable condition assessment of infrastructures. Interdisciplinary knowledge is usually required for data interpretation using NDT&E techniques. This talk will briefly introduce some NDT&E methods that are frequently used in asphalt concrete (AC) pavement applications. Backgrounds such as signals and waves, which are cornerstones of NDT&E techniques, will be mentioned. State-of-art and state-of-practice methods will be covered, such as ground-penetrating radar (GPR), intelligent compaction (IC), density gauge, infrared thermography, and photographic/laser imaging. GPR will be highlighted due to its applications in construction monitoring and in-service condition assessment of AC pavement. Future visions of NDT&E applications such as data fusion, integrated hardware platforms, and advanced signal processing will be discussed in the end. This talk aims to provide reference and guidance for users to appropriately utilize NDT&E techniques for the AC pavement survey.

**Bio:** Dr. Siqi Wang is the Post-Doctoral Research Fellow in the Department of Civil and Environmental Engineering at Hong Kong Polytechnic University (PolyU). He received both bachelor’s (2013) and master’s degrees (2016) from Southeast University and doctoral degree (2021) from University of Illinois, Urbana-Champaign. His research mainly focuses on non-destructive testing & evaluation using ground-penetrating radar, remote sensing, infrastructure condition assessment, and risk analysis. He also received several electrical engineering credentials related to advanced digital signal processing. Dr. Wang has more than 20 publications in interdisciplinary journals such as NDT&E International, IEEE Transactions on Geoscience and Remote Sensing, and Surveys in Geophysics. He serves as the young academic editor of Journal of Road Engineering. He is the young committee member and secretary of the communication task force of IACIP. He is a member of APSE, ASCE, and IEEE.

**Date and Time:**

9:30 pm - 10:30 pm, August 7th (Sunday), 2022 (Beijing Time in China)

9:30 am - 10:30 am, August 7th (Sunday), 2022 (Eastern Time at New York)

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