



Department of Data Science

香港城市大學
City University of Hong Kong

DS DISTINGUISHED SEMINAR

AI-Empowered Fast Stability Assessment

Date: 16 January 2026 (Friday)

Time: 10:30am - 11:30am

Venue: Rm G7603, Yeung Kin Min Academic Building,
City University of Hong Kong



Prof. Yilu LIU

GUEST SPEAKER'S PROFILE

Prof. Yilu LIU received her M.S. and Ph.D. degrees from the Ohio State University, Columbus, in 1986 and 1989. She received the B.S. degree from Xian Jiaotong University, China. Prof. Liu is currently the UT-ORNL Governor's Chair at the University of Tennessee and Oak Ridge National Laboratory. She is also the deputy director of the DOE/NSF engineering research center CURENT (curent.utk.edu). She led the effort to create the North American power grid Frequency Monitoring Network FNET/GridEye (fnetpublic.utk.edu, powerit.utk.edu). Prof. Liu is also an expert in large grid dynamic modeling, simulations, and monitoring. Dr. Liu is a member of National Academy of Engineering, a member of the National Academy of inventors, a fellow of IEEE. She can be reached at Liuy1@ornl.gov or Liu@utk.edu.

ABSTRACT

This presentation will discuss achieving faster than real-time grid stability assessment using trained AI models.

This work is intended to overcome two major challenges: the lengthy large system dynamic simulation time for predictive control and the simulation convergence issues that may encounter for stressed systems.