Full Name (English):	Huafeng Wu	
Affiliated Institution and Title (English):	Professor at Shanghai Maritime University	

Biography
(Please provide in paragraph form within 500 words.)

Dr. Huafeng Wu is a Professor at Shanghai Maritime University and leads the Shanghai Key Innovative Research Group focused on intelligent marine technology and systems. He has authored over 100 technical publications, holds 20 national and international patents, and has contributed to three book chapters. Dr. Wu is a Senior Member of IEEE, Vice President of the Shanghai Electronics Society, and Vice Dean of the Graduate School at Shanghai Maritime University. Dr. Wu serves on the editorial boards of Computer Communications and Cyber-Physical Systems and is a Guest Editor for the Journal of Marine Science and Engineering. As the principal investigator, he leads projects funded by the General and Key Program of the National Natural Science Foundation of China, the National Key R&D Program of China, the "Shuguang Program" talent project of Shanghai, and the Key Program of the Shanghai Science and Technology Commission, among others. His contributions to the field have been recognized with the Youth Science and Technology Award from the China Institution of Navigation, the Second Prize of the Science and Technology Progress Award from Shanghai, and the Second Prize of the Science and Technology Progress Award from the China Institution of Navigation.

Speech Title (English):

Sensing-Recognitio-Communication-Navigation for Next-Generation Maritime Navigation System

Speech Abstract
(Please provide in paragraph form within 500 words.)

This presentation discusses key issues and innovative solutions for enhancing maritime navigation systems in complex electromagnetic fields and under challenging conditions. The focus is on reliable ship detection and recognition in complex marine environments, intelligent path planning under obstacle conditions, and precise target localization in unique acoustic propagation environments. The conference paper highlights the development of communication infrastructure and the application of intelligent ship control in areas with high obstacle density. It also addresses the advancement of maritime navigation systems, emphasizing target localization and intelligent control. The paper concludes with an innovation and summary section, summarizing the significance of the discussed protocols and experiments.