

講演会のご案内

Autonomous Positioning and Cooperation Technology of Marine Unmanned Systems

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Schedule: 2月8日(月) : PM7:00-9:00 (Tokyo Time)

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Abstract: Autonomous positioning is the core technology of unmanned systems, and it is the premise and guarantee for the system to complete all kinds of tasks. In recent years, Shanghai Jiaotong University IPAC marine unmanned system team has carried out a lot of research work around the positioning and cooperation technology of marine unmanned systems. This talk introduces the research progress of IPAC maritime unmanned system team, focusing on the research work of air-sea cooperation positioning and multi-ship cooperation positioning. The air-sea cooperation positioning system is composed of UAV and UAV, which realizes UAV landing based on visual navigation through intelligent autonomous positioning, and supplies energy; multi-ship cooperation positioning system is composed of multiple ships, which cooperates with each other to complete the desired task through high-precision positioning. The report introduces the research background and requirements, analyzes the key problems and challenges of the system, demonstrates the results of technical verification, and looks forward to the future of technical applications.



Biography: Weidong ZHANG received his BS, MS, and PhD degrees from Zhejiang University in 1990, 1993, and 1996, respectively. He is the recipient of the National Science Fund for Distinguished Young Scholars, Cheung Kong Scholar of the Ministry of education, Humboldt Scholar of Germany, and Outstanding Subject Leader of Shanghai. He is now the director of the Marine Automation Engineering Research Center of Shanghai University. The research

fields include intelligent control theory and artificial intelligence theory, and their applications in marine unmanned systems. His most important academic contribution is putting forward quantitative control theory. He has published an English monograph, and more than 300 international papers, and hold 52 China invention patents.