

## A Look at the Safety and Trust Issues in Vehicle Autonomous Driving System



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19 July 2024 (Fri) 11:00 am - 12:00 nn YEUNG-P7303

## **Abstract**

The safety and trust Issues of vehicle autonomous driving system are emerging research topics. This presentation introduces the safety control problems in autonomous driving decision-making and control summarized from the research process of supervised-learning and self-learning of the research team, and then introduces the research progress in safety decision-making and control based on constrained-dynamics and continuous learning in long-tail scenarios. Based on the latest development in the area, we also discuss the trust issues of the autonomous driving system.

## **About the Speaker**

Jin Huang, Ph.D., is currently the Deputy Director of the Institute of Automotive Engineering and Associate Professor at the School of Vehicle and Mobility, Tsinghua University. He is also the Director Assistant of the National Key Laboratory of Green Intelligent Vehicles and Transportation, the Deputy Director of the Youth Working Committee of the China society of Automotive Engineering. He has won the award of National Science Fund for Outstanding Youth Scholars. He served as guest-editor-in-chief of special issues of three international journals and SAE ITS Technical Committee Member. His research interests mainly about: intelligent vehicle design, decision-making and control for autonomous vehicle. He has hosted the more than 10 major projects from both NSFC and the industrial community. He has published more than 60 SCI papers, 3 books, and was authorized for more than 40 invention patents.