Editorial

ICT Innovations in Future Smart Cars

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This special issue focuses on innovations of information communication technology (ICT) in future smart cars. ICT is a key technology for developing smart cars, its usage in current vehicles is steadily progressing, and the related research issues are very popular and challenging, especially for future smart cars. The objective of this special issue is to provide a leading forum for timely, in-depth presentation of recent advances in services or innovational technologies for future smart cars.

Six papers, ranging in a spectrum from basic theoretical research to solid application research, are included in this special issue. In “*Performance evaluation of IEEE 1609 WAVE for vehicular communications*,” the authors proposed a Markov chain model to support IEEE 802.11 EDCA with transmit opportunity (TXOP) mechanism and presented a more accurate analysis under nonideal channel environment. In “*Palm personal identification for vehicular security with a mobile device*,” the focus is placed on a palm image recognition method to identify individual for vehicular application. In “*Detection of overhead contact lines with a 2D-digital-beamforming radar system for automatic guidance of trolley trucks*,” a radar system with two-dimensional digital beamforming capability is proposed to offer a compact measurement solution. In “*Efficient noninteractive secure protocol enforcing privacy in vehicle-to-roadside communication*

networks,” the authors proposed an efficient noninteractive secure protocol to preserve privacy of drivers in vehicle-to-roadside (V2R) communication. In “*A driver face monitoring system for fatigue and distraction detection*,” a novel approach is introduced for driver hypovigilance detection based on the symptoms related to face and eye region. In “*A geo-aware and VRP-based public bicycle redistribution system*,” an actual path distance optimization method is proposed for VRP to adapt the several additional constraints of road problems.

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