Holzmann

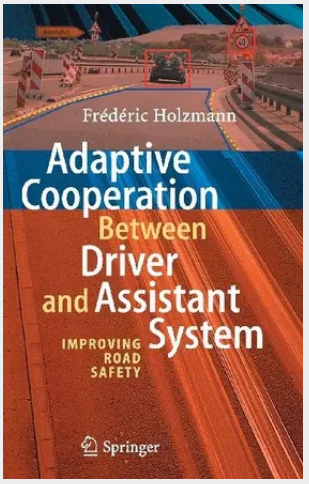
Adaptive Cooperation between Driver and Assistant System

Improving Road Safety

One of the next challenges in vehicular technology field is to improve drastically the road safety. Current developments are focusing on both vehicle platform and diverse assistance systems. This book presents a new engineering approach based on lean vehicle architecture ready for the drive-by-wire technology.

Based on a cognitive functionality split, execution and command levels are detailed. The execution level centralized over the stability control performs the motion vector coming from the command level. At this level the driver generates a motion vector which is continuously monitored by a virtual co-pilot. The integration of assistance systems in a safety relevant multi-agent system is presented here to provide first an adequate feedback to the driver to let him recover a dangerous situation. Robust strategies are also presented for the intervention phase once the command vehicle has to be optimized to stay within the safety envelope.

One of the next challenges in vehicular technology field is to improve drastically the road safety. Current developments are focusing on both vehicle platform and diverse assistance systems. This book presents a new engineering approach based on lean vehicle architecture ready for the drive-by-wire technology.Based on a cognitive functionality split, execution and command levels are detailed. The execution level centralized over the stability control performs the motion vector coming from the command level. At this level the driver generates a motion vector which is continuously monitored by a virtual co-pilot. The integration of assistance systems in a safety relevant multi-agent system is presented here to provide first an adequate feedback to the driver to let him recover a dangerous situation. Robust strategies are also presented for the intervention phase once the command vehicle has to be optimized to stay within the safety envelope.



160,49 €
149,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540744733
Medium: Buch
ISBN: 978-3-540-74473-3
Verlag: Springer
Erscheinungstermin: 19.11.2007
Sprache(n): Englisch
Auflage: 1. Auflage 2007
Produktform: Gebunden
Gewicht: 478 g
Seiten: 225
Format (B x H): 160 x 241 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)