Record Nr. UNINA9910800067803321 **Titolo** Handbook of driving simulation for engineering, medicine, and psychology / / edited by Donald L. Fisher. [et al.] Pubbl/distr/stampa Boca Raton:,: Taylor & Francis Group,, 2011 **ISBN** 0-429-13825-3 1-138-07458-6 1-4200-6101-1 Descrizione fisica 1 online resource (728 p.) Altri autori (Persone) FisherDonald L Disciplina 629.28/3011 Soggetti Automobile driving simulators Automobile driving - Physiological aspects Automobile driving - Psychological aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover; Contents; Acknowledgments; Editors; Contributors; Chapter 1: Handbook of Driving Simulation for Engineering, Medicine, and Psychology: An Overview; Chapter 2: A Short History of Driving Simulation; Chapter 3: Using Driving Simulators Outside of North America; Chapter 4: The Future of Driving Simulation; Chapter 5: Twelve Practical and Useful Questions About Driving Simulation: Chapter 6: Scenario Authoring; Chapter 7: Physical Fidelity of Driving Simulators; Chapter 8: Sensory and Perceptual Factors in the Design of **Driving Simulation Displays** Chapter 9: Psychological Fidelity: Perception of RiskChapter 10: Surrogate Methods and Measures; Chapter 11: Validating Vehicle Models; Chapter 12: Cross-Platform Validation Issues; Chapter 13: Simulator Validity: Behaviors Observed on the Simulator and on the Road; Chapter 14: Simulator and Scenario Factors Influencing Simulator Sickness: Chapter 15: Independent Variables: The Role of Confounding and Effect Modification; Chapter 16: External Driver Distractions: The Effects of Video Billboards and Wind Farms on Driving Performance;

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## Sommario/riassunto

Effective use of driving simulators requires considerable technical and methodological skill along with considerable background knowledge. Acquiring the requisite knowledge and skills can be extraordinarily time consuming, yet there has been no single convenient and comprehensive source of information on the driving simulation research being conducted around the world. A how-to-do-it resource for researchers and professionals, Handbook of Driving Simulation for Engineering, Medicine, and Psychology brings together discussions of technical issues in driving simulation with b

Control Theoretic Approach to Driving Performance