

The 2005 DARPA Grand Challenge [The Great Robot Race /

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Springer Berlin Heidelberg, 2007

Monografía

The DARPA Grand Challenge was a landmark in the field of robotics: a race by autonomous vehicles through 132 miles of rough, cross-country Nevada terrain that showcased exciting and unprecedented capabilities in robotic perception, navigation, and control. The event took place in October 2005, and drew teams of competitors from academia and industry, and many garage hobbyists. This book presents fifteen technical papers that are written at a level that makes them easily accessible to a broad technical audience, describing the technology behind most of the robotic vehicles that participated in this famous race. The papers describe each team's driverless vehicle, race strategy, and insights. As a whole, they present the state of the art in autonomous vehicle technology, and offer a glimpse of future technology for tomorrow\2019s driverless cars. This book will serve as an authoritative, archival source for the DARPA Grand Challenge and a \201Cmust have\201D for robotics students and researchers, since it describes the state of the art in perception, planning and control

Título: The 2005 DARPA Grand Challenge Recurso electrónico-En línea]:] The Great Robot Race edited by

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Editorial: Berlin, Heidelberg Springer Berlin Heidelberg 2007

Descripción física: XLI, 522 p. digital

Tipo Audiovisual: Engineering Artificial intelligence Systems theory Engineering Control Engineering Automation and Robotics Artificial Intelligence (incl. Robotics) Machinery and Machine Elements Systems

Theory, Control

Mención de serie: Springer Tracts in Advanced Robotics 1610-7438 36

Documento fuente: Springer eBooks

Nota general: Engineering (Springer-11647)

Contenido: Cornell University's 2005 DARPA Grand Challenge Entry -- SciAutonics - Auburn Engineering's Low Cost, High Speed ATV for the 2005 DARPA Grand Challenge -- The Golem Group / UCLA Autonomous Ground Vehicle in the DARPA Grand Challenge -- Team CIMAR's NaviGATOR: An Unmanned Ground Vehicle for Application to the 2005 DARPA Grand Challenge -- A Robust Approach to High-Speed Navigation for

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Restricciones de acceso: Accesible sólo para usuarios de la UPV

Tipo recurso electrónico: Recurso a texto completo

Detalles del sistema: Forma de acceso: Web

ISBN: 9783540734291

Autores: Iagnemma, Karl Singh, Sanjiv

Entidades: SpringerLink (Servicio en línea)

Enlace a formato físico adicional: Printed edition 9783540734284

Punto acceso adicional serie-Título: Springer Tracts in Advanced Robotics 1610-7438 36

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