Semi-Autonomous Cooperative Driving for Mobile Robotic Telepresence Systems

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Abstract

Mobile robotic telepresence (MRP) has been introduced to allow communication from remote locations. Modern MRP systems offer rich capabilities for human-human interactions. However, simply driving a telepresence robot can become a burden especially for novice users, leaving no room for interaction at all. In this video we introduce a project which aims to incorporate advanced robotic algorithms into manned telepresence robots in a natural way to allow human-robot cooperation for safe driving. It also shows a very first implementation of cooperative driving based on extracting a safe drivable area in real time using the image stream received from the robot.

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