



Obstacle Avoidance Methods for Mobile Robots at Higher Speeds

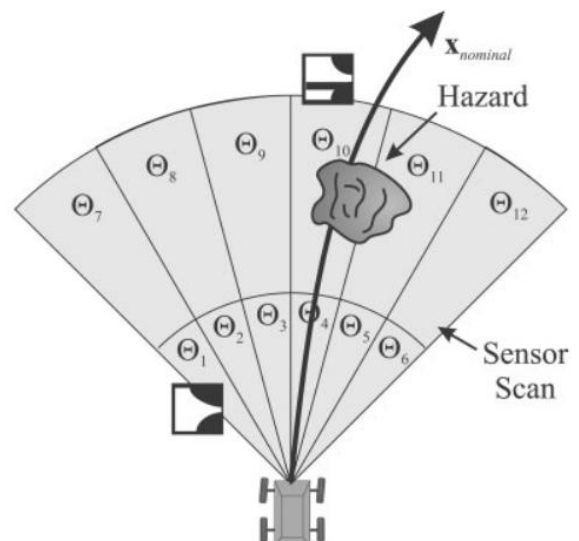
One of the main tasks of mobile robots is the autonomous obstacle avoidance. Furthermore, many important assistance, search and rescue, exploration and surveillance applications need a wheeled mobile robot driving fast and successfully avoiding obstacles on the way.

Various obstacle avoidance methods have been developed, and some of them are specialized for high speed robots. The goal of this thesis is to implement two or three methods developed for higher speeds and test them using one of the outdoor buggies available at the department. The results obtained by different methods need to be compared.

The candidate will get the recommended literature and will be able to choose the most interesting methods which should then be implemented. One of the outdoor buggies will be at the disposal.

Knowledge in C++ is required, and some experience with robots is desired.

Communication with the supervisor is in German or English.



Kontakt

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Spenko et al, "Hazard Avoidance for High-Speed Mobile Robots in Rough Terrain", 2005