BOF
Bayesian Occupation Filter

The BOF toolbox is a C++ library that implements the Bayesian Occupation Filter. It is often used for modelling dynamic environments. It contains the relevant functions for performing bayesian filtering in grid spaces. The output from the BOF toolbox are the estimated probability distributions of each cell’s occupation and velocity. Some basic sensor models such as the laser scanner sensor model or gaussian sensor model for gridded spaces are also included in the BOF toolbox. The sensor models and BOF mechanism in the BOF toolbox provides the necessary tools for modelling dynamic environments in most robotic applications. This toolbox is patented under two patents: “Procédé d’assistance à la conduite d’un véhicule et dispositif associé” n° 0552735 (9 September 2005) and “Procédé d’assistance à la conduite d’un véhicule et dispositif associé amélioré” n° 0552736 (9 September 2005).

Technological barrier (mesure de l’innovation, caractère différentiant)

Possible fields of application (A quoi ça sert, qu’est ce qu’on peut en faire, avec qui?)

Language, standard, environment: C / C++ / CUDA

Key words:

License: (libre, accord de licence possible, existence d’une communauté, sa taille)

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