

Title (en)

INTERACTIVE COMPUTER-IMPLEMENTED METHOD, GRAPHICAL USER INTERFACE AND COMPUTER PROGRAM PRODUCT FOR BUILDING A HIGH-ACCURACY ENVIRONMENT MAP

Title (de)

INTERAKTIVES COMPUTERIMPLEMENTIERTES VERFAHREN, GRAFISCHE BENUTZEROBERFLÄCHE UND COMPUTERPROGRAMMPRODUKT ZUR ERSTELLUNG EINER HOCHGENAUEN UMGEBUNGSKARTE

Title (fr)

PROCÉDÉ MIS EN OEUVRE PAR ORDINATEUR INTERACTIF, INTERFACE GRAPHIQUE UTILISATEUR ET PRODUIT-PROGRAMME INFORMATIQUE POUR CONSTRUIRE UNE CARTE D'ENVIRONNEMENT DE HAUTE PRÉCISION

Publication

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Application

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Abstract (en)

[origin: WO2019122939A1] A computer-implemented method for interactively building a high-accuracy environment map (10), an interactive graphical user interface (20), and a computer program product are disclosed. The computer-implemented method, in accordance with the present invention comprising the steps of iterative inputting of user corrections and subsequently rebuilding of the environment map (10) and of at least one trajectory (11), honouring the inputted user corrections and sensor measurement dataset, wherein after each inputted user correction the subsequently rebuilt environment map (10) and at least one rebuilt trajectory (11) are displayed in the graphical user interface (20); assessing by the user in the graphical user interface (20) if there are still visible defects in the subsequently rebuilt environment map (10), and if not exporting the rebuilt environment map (10) to the persistent storage (212). The interactive graphical user (20), in accordance with the present invention, comprising a zoomable/pannable main map window (400); a user corrections management window (403), and a zoomable/scrollable trajectories timeline window (405), wherein the graphical user interface (20) is provided with tools for rewinding the environment map (10) along selected trajectory (11), and with tools for iterative inputting of user corrections. The interactive method and an intuitive, easy-to-use, user interface (20) enabling users without expert knowledge about SLAM algorithms to tune the final output, i.e. the built environment map (10) and trajectory (11), by intervention into the execution of the used SLAM algorithm.

IPC 8 full level

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