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(54) Title (EN): A SPEED CONTROL COMMAND AUTO-CALIBRATION SYSTEM FOR AUTONOMOUS VEHICLES

(54) Title (FR): SYSTÈME D'AUTO-ÉTALONNAGE D'INSTRUCTION DE COMMANDE DE VITESSE POUR VÉHICULES AUTONOMES

(57) Abstract:

(EN): A speed control command auto-calibration system for autonomous vehicles receives a first control command and a speed measurement of the ADV (901). The system determines an expected acceleration of the ADV based on the speed measurement and the first control command (902). The system receives an acceleration measurement of the ADV (903). The system determines a feedback error based on the acceleration measurement and the expected acceleration (904). The system updates a portion of the calibration table based on the determined feedback error (905). The system generates a second control command to control the ADV based on the calibration table having the updated portion to control the ADV autonomously according to the second control command (906).

(FR): Un système d'auto-étalonnage d'instruction de commande de vitesse pour véhicules autonomes reçoit une première instruction de commande et une mesure de vitesse de l'ADV (901). Le système détermine une accélération attendue de l'ADV sur la base de la mesure de vitesse et de la première instruction de commande (902). Le système reçoit une mesure d'accélération de l'ADV (903). Le système détermine une erreur de rétroaction sur la base de la mesure d'accélération et de l'accélération attendue (904). Le système met à jour une partie de la table d'étalonnage sur la base de l'erreur de rétroaction déterminée (905). Le système génère une seconde instruction de commande pour commander l'ADV sur la base de la table d'étalonnage ayant la partie mise à jour pour commander l'ADV de manière autonome en fonction de la seconde instruction de commande (906).

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