عنوان مقاله:

Intelligent Control System of Automobile Window using Fuzzy Logic

محل انتشار:

کنفرانس بین المللی مدل سازی غیر خطی و بهینه سازی (سال: 1391)

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خلاصه مقاله:

It has been attempted to develop an intelligent control system based on fuzzy logic to regulate height of automobile windows in this paper. An ATMega32 microcontroller is responsible for the system of fuzzy control programmed by Bascom AVR software. The control system involves two manual and automaticmodes. In the automatic mode, there is no need to keep switch pressed for complete up and down functions of the window. Meanwhile, using the designed system is both convenient and accurate with the possibility to regulate position of the window after turning off the car. Another feature of this system is its sensitivity to carbon monoxide and carbon dioxide gasses. Whenever the extent of CO or CO2 gasses exceeds an allowablelimit, the windows will automatically come down in order to prevent asphyxiation of passengers. Simulation was implemented by MATLAB using fuzzy logic and the obtained results were compared with those from fuzzy linear regression method

کلمات کلیدی:

regulating height of automobile window, sensitivity to CO and CO2, fuzzy linear regression,MATLAB fuzzy logic

لینک ثابت مقاله در پایگاه سیویلیکا: