D-FA01 Control Device Smart Actuators

09:00 – 11:00 **Chair : Kim Il-Hwan (Kangwon National Univ.)**
Room : 4127 **Co-Chair : Song Jeong-Hoon (Inje Univ.)**

11:00 – 11:20 **D-FA01-7**

A Study on the Modelling and Control Method of an Anti-lock Brake System

Lim Chul-ki, Song Jeong-Hoon and Boo Kwang-Suck
(Inje University)

An Anti-lock Brake System (ABS) is developed to increase the stability of vehicle and to reduce the stopping distance when braking manoeuvres by measuring the wheel and vehicle speed. An ABS mathematical model which describes the dynamics of vehicle and calculate the stopping distance, is explained in this paper. To proceed this study, a mathematical model is produced with simulink software package. Although the model considered here is relatively simple, it retains the essential dynamics of the system. The results are evaluated at the various driving or road conditions. The results from mathematical model show that ABS reduces the stopping distance at the various road conditions. This mathematical model could be...