Optimal Path Planning of Automated Guided Vehicle using Dijkstra Algorithm under Dynamic conditions

Sungkwan Kim and Hojun Jin and Minah Seo
The CCS Graduate School of Green Transportation, KAIST, Korea
Dongsoo Har
The CCS Graduate School of Green Transportation, KAIST, Korea

- The Dijkstra algorithm is modified for AGV to perform tasks with minimized energy consumption and optimal path.

- AGV's tractive force model is applied to path planning method.

- According to the mass variation and road conditions, the weights between vertices are determined.

Optimal path planning aiming at minimization of energy consumption of AGV under dynamic