# Article information:

A Braking Force Distribution Strategy for Four-in-Wheel-Motor-Driven Electric Vehicles on Roads with Different Friction Coefficients | SpringerLink
<https://link.springer.com/article/10.1007/s12239-021-0095-2>

# Article summary:

1. This paper presents an active collision avoidance system based on a braking force distribution strategy for four-in-wheel-motor-driven electric vehicles (FIWMD-EVs) on roads with different friction coefficients.

2. The proposed braking force distribution strategy is improved and its general analytic expressions are derived, providing the theoretical basis of braking force distribution between front and rear wheels.

3. Simulations using rapid control prototyping (RCP) and hardware-in-the-loop (HIL) simulator are performed to demonstrate the effectiveness of control scheme and adaptability of the active collision avoidance system based on the proposed braking force distribution strategy on complex roads.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides a detailed description of the proposed braking force distribution strategy for four-in-wheel-motor-driven electric vehicles (FIWMD-EVs). The authors provide clear explanations of their approach, including general analytic expressions that provide the theoretical basis of braking force distribution between front and rear wheels. Furthermore, simulations using rapid control prototyping (RCP) and hardware-in-the-loop (HIL) simulator are performed to demonstrate the effectiveness of control scheme and adaptability of the active collision avoidance system based on the proposed braking force distribution strategy on complex roads.

The article does not appear to have any major biases or one sided reporting, as it provides a comprehensive overview of the proposed approach without favoring any particular point of view or opinion. Additionally, all claims made in the article are supported by evidence from simulations using RCP and HIL simulators, which further adds to its trustworthiness.

The only potential issue with this article is that it does not explore any counterarguments or alternative approaches to solving this problem. However, given that this is a research paper focused on presenting a new approach rather than comparing different approaches, this is understandable.

# Topics for further research:

* Braking force distribution strategies for electric vehicles
* Adaptive collision avoidance systems
* Rapid control prototyping
* Hardware-in-the-loop simulation
* Four-in-wheel-motor-driven electric vehicles
* Alternative approaches to braking force distribution

# Report location:

<https://www.fullpicture.app/item/71e0b1698198b48b269f570e3e767bf7>