

# Quarter Car Suspension State Space Model and Full State Feedback Control for Real-Time Processing

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Abstract:

This paper presents the examination of the suspension of a quarter car model from the point of view of observability and controllability. The modeling of an active suspension with full state feedback control and the design of a state observer is planned to be used for real-time processing of the university's self-driven vehicles under development. The validation of the concept is demonstrated also. These types of mechatronics design synergy, merged with advanced engineering pedagogy are essential for professionals with appropriate qualifications from universities to enter the industry.

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