

## An Inquiry on 2-Mass and Wheeled Mobile Robot Dynamics

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**Abstract :** In this paper, a general dynamical model is derived using the Lagrange formalism. The two masses: sprang and unsprang are included in a six-degree of freedom model for a sprung mass. The unsprung mass is included and shown only in a simplified model, although its equations have also been derived by an author. The simplified equations, more suitable for the computer model of robot's dynamics are also shown.

**Keywords :** dynamics, mobile, robot, wheeled mobile robots

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