

عنوان مقاله:

Control of Non-holonomic Mobile Robot System via Feedback Linearization Controller and Anti-control of Chaos

محل انتشار:

سومین کنفرانس ملی تکنولوژی مهندسی برق و کامپیوتر (سال: 1396)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

In this paper, feedback linearization controller has been designed for mobile robot system. In order to create chaos dynamic, anti-control of chaos is applied to convert a non-chaotic system to a chaotic system. To reduce energy and increase performance of the system, nonlinear system error tracking has been synchronized with chaotic gyroscope. In other words, control effort is based on synchronizing error system with chaos to decrease control cost. The results of simulation has been shown the combination of feedback linearization control and anti-control of chaos have proved that using of these techniques leads to high efficiency of the proposed method. At the end, energy signal control has been calculated and compared to show energy reduction.

کلمات کلیدی:

Non-holonomic mobile robot; Anti-control of chaos; Feedback linearization controller

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<https://civilica.com/doc/749171>

