

عنوان مقاله:

Quadrotor UAV Guidance For Ground Moving Target Tracking

محل انتشار:

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خلاصه مقاله:

The studies in aerial vehicles modeling and control have been increased rapidly recently. In this paper , a coordination of two types of heterogeneous robots , namely unmanned aerial vehicle (UAV) and unmanned ground vehicle (UGV) is considered. In this paper the UAV plays the role of a virtual leader for the UGVs. The system consists of a vision-based target detection algorithm that uses the color and image moment of a given target. The modeling of the vertical take off and landing vehicle will be described by using Euler - Newton equations. All of flight controller commands are directly generated based on the offset of the target from the image frame. The image processing and intelligent control algorithms such a Kalman filter and so on have been implemented on a latest computer. Matlab Simulink software has been used to test, analyze and compare the performance of the controllers in simulations

کلمات کلیدی:

UAV, Intelligent control, Modeling, Target tracking

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