
AUTONOMOUS VISUAL NAVIGATION IN AN UNMANNED AERIAL VEHICLE ONBOARD SYSTEM

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Abstract

The article deals with verifying efficiency of autonomous visual navigation systems for unmanned aerial vehicles in a ground-based environment. We present a contemporary classification of unmanned aerial vehicles and their possible uses. We consider the structure and principle of operation of a semi-empirical simulator bench for testing unmanned aerial vehicle control systems. We describe a target environment simulator for testing optoelectronic equipment of the navigation system. We come to the conclusion that it is feasible to use this bench during initial stages of testing unmanned aerial vehicle control algorithms

Keywords

Optoelectronic systems, unmanned aerial vehicle, semi-empirical simulator bench, target environment, simulator

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