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Review on System Identification for Quadrotor Unmanned Aerial Vehicle (UAV) (Conference Paper)

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Abstract

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Unmanned Aerial Vehicle (UAV) has been the interest in many researchers. It has become increasingly popular over the last decade. Quadrotor UAV is a small helicopter and is highly unstable without any flight controller. Therefore, a proper control on the UAV's dynamic need to be applied for stabilization. An accurate model of the vehicle dynamics is important to stabilize the UAV. System identification allows the researchers to build mathematical models of a dynamic system based on measured data. In this paper, various system identifications on quadrotor UAV are discussed. This paper only reviews the literature on system identification based on other researches that had been done. Critical review on each method is briefly discussed. This paper also provides the idea of system identification and its characteristics. Concluding remark is given regarding the suitable method for the model chosen. © 2019 IEEE.

SciVal Topic Prominence

Topic: Unmanned aerial vehicles (UAV) | Control | Quadrotor unmanned

Prominence percentile: 99.689 

Author keywords

[critical review](#) [Quadrotor UAV](#) [System identification](#)

Indexed keywords

Engineering controlled terms: [Aircraft control](#) [Antennas](#) [Identification \(control systems\)](#) [Religious buildings](#)

Engineering uncontrolled terms: [Accurate modeling](#) [Critical review](#) [Flight controllers](#) [Quad-rotor UAV](#) [Quadrotor unmanned aerial vehicles](#) [Vehicle dynamics](#)

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