

Abstract :

This paper presents a Chattering Free Robust Decentralized Control for Stabilization and tracking of an Unmanned Aerial vehicle (UAV) attitude of type Quadrotor. The main objective of this work is to reduce the chattering phenomenon without losing the sliding mode robustness. To achieve our purpose we have decompose the system to many sub-systems then the discontinuous part of the control signal is replaced by continuous one, Finally the simulation results indicate that the control performance for the system stabilization and tracking are satisfactory and the proposed Chattering Free Robust Decentralized Control can achieve favorable performances.