Path Planning Approach for a Quadrotor Unmanned Aerial Vehicle

Authors

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Abstract

A path planning method for an unmanned aerial system type quadrotor is proposed in this work. It is based on Dubins curves. Therefore, different points (initial and ending) are set for generation of several paths. Additionally, to validate the proposed model a computational resource is applied. Also, some flight dynamics limits and orientation angles computations are considered to be able to determine a simplified Dubins model. Dubins paths are commonly divided into low, medium and high altitude gains. It will depend on the altitude established for the start and end points and other configurations.