Aerospace Vehicle Simulation and Analysis Applying Pure Pursuit Guidance Method

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Abstract

In this paper we study aerospace vehicle motion in three dimensions. We formulate three degree of freedom kinematic equations of motion using pure pursuit guidance method, which is known as path planning algorithm and it was stretched well beyond its intended usage by many aerospace applications also it is used to accomplish goal-seeking and path tracking. we solve the kinematic three degree of freedom equations of motion by numerical integration to make simulation using Matlab program.

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Index Terms

| Computer Science | Information Sciences |

Keywords

pure pursuit, guidance method, analytical form, numerical solution, mathematical model