



Title: Analysis and simulation of aerial unmanned vehicle using pure pursuit guidance law.

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Abstract: In this paper an analysis and simulation of aerial unmanned vehicle is presented. The three degree of freedom [3DOF] equations of motion for the aerial unmanned vehicle is proved using pure pursuit guidance method which is known as path planning algorithm. The pure pursuit guidance method was stretched well beyond its intended usage by many aerospace applications. The pure pursuit algorithm is used to accomplish goal-seeking and path tracking. An analysis and flight trajectory simulation for the aerial unmanned vehicle is given based on MATLAB program.

Biography:

1. Ahmed R. El-Sawi was born in Egypt in 1984. He received the bachelor degree in electrical engineering from Military Technical College, Cairo, Egypt, in 2007. He is working to finalize his master degree and expected to finish it in 2016. His area of interest is Control and Navigation techniques for Aerospace systems.
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3. Ali Taki El-Deen received the PhD degree in Electronics and Communications Engineering in "Encryption and Data Security in Digital Communication Systems". He has a lot of publications in various international journals and conferences. His current research interests are in multimedia processing, wireless communication systems, and Field Programmable Gate Array (FPGA) applications.