



EXPERIMENTAL STUDY OF TRAJECTORY TRACKING AND PATH PLANINIG OF WHEELED MOBILE ROBOT (WMR)

Reviewer 1: --

1. In several sections sentences has spelling and grammar mistakes, which needs to be corrected.
2. In several sections sentences has space problem, which needs to be corrected.
3. Proper sentence construction in several sections to be modified.

Actual	Suggested
<i>of trajectory where studied such as</i>	<i>of the trajectory were studied such as</i>
<i>In addition, image processing technique</i>	<i>Also, the image processing technique</i>
<i>cases are not the same and the shape of obstacles are</i>	<i>cases is not the same and the shape of obstacles is</i>
<i>very good matching between simulation and</i>	<i>very good match between the simulation and</i>
<i>Also the grid graph method were efficient</i>	<i>Also, the grid graph method was efficient</i>
<i>were the MR moves from initial location</i>	<i>were the MR moves from the initial location</i>
<i>Path planning, is the process of determining</i>	<i>Path planning is the process of determining</i>
<i>experimental results showed that Fuzzy-WDO algorithm</i>	<i>experimental results showed that the Fuzzy-WDO algorithm</i>
<i>controller which control the robot velocity</i>	<i>the velocity tracking error convergence</i>
<i>Result showed a very good performance where all errors converges to zero</i>	<i>The result showed a very good performance where all error converge to zero</i>
<i>figure 1 is contain the main board, acrylic</i>	<i>figure 1 contains the mainboard, acrylic</i>
<i>tracking is shown is figure 2 where this figure</i>	<i>tracking is shown in figure 2 where this figure</i>
<i>the robot start its motion and move on until it enter the</i>	<i>the robot starts its motion and move on until it enters the</i>

respectively with time equal to 37 second	respectively with a time equal to 37 seconds
tracking begin with high error in x direction	tracking begin with high error in x-direction
decrease till it converge to zero at the end	decreases till it converges to zero at the end
y direction the error start with the minimum	the y-direction, the error starts with the minimum
then it followed by rise and fall till ending	then it followed by rising and fall till ending
In which that errors are refers to the divergence	In which that errors are referred to the divergence
start point to the point of desired path	start point to the point of the desired path
arrive the desired orientation. Which means	arrive at the desired orientation. This means
orientation are created due to this motions especially	orientation are created due to these motions especially
high change in path form that are demonstrated	high change in path form that is demonstrated
orientation errors are stabilize after 6 seconds	orientation errors are stabilized after 6 seconds
from maximum angular velocity error value that is reach	from the maximum angular velocity error value that reaches
Position tracking errors in X-axis for first case	Position tracking errors in X-axis for a first case
tracking is shown is figure (4) where it shows	tracking is shown in figure (4) where it shows
start its motion and move on until it enter the	starts its motion and move on until it enters the
time equal to 48 second. In this case the x and	time equal to 48 seconds. In this case, the x and
approximately along the full case where the x error start with	approximately along with the full case where the x error starts with
error start with the minimum value then its	error starts with the minimum value than its
that are demonstrated in figure	that is demonstrated in figure
which it fluctuated from maximum angular	which it fluctuated from the maximum angular
that is reach to 0.15 rad/sec, to minimum value.	that reaches to 0.15 rad/sec, to the minimum value
Position tracking errors in X-axis for second	Position tracking errors in X-axis for a second

The third desired trajectory for straight line	The third desired trajectory for the straight line
Simulation result for the straight line trajectory	The simulation result for the straight-line trajectory
shown is figure (6.A) where the blue line	shown in figure (6.A) where the blue line
robot start moving from point (0,0) and continue	robot starts moving from point (0,0) and continue
It is obvious that the trajectory tracking	The trajectory tracking begins
The errors are decrease and converge to	The errors are decreased and converge to
motion to follow the desired orientation	motion to follow the desired orientation
its reaches to 2.5 degree at the corners.	its reaches to 2.5 degrees at the corners.
there is order of turning 60^0 counter clockwise.	there is an order of turning 60^0 counterclockwise.
It is clear from figure (9) that the trajectory	It is clear from the figure (9) that the trajectory

Comments to Editor :

1. After modifying the content, paper can be accepted for possible publication.

Reviewer 2: --

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. The authors are requested to rewrite the abstract, as this section does not properly depict the paper's actual aim and objective.
4. All the equations should be typed only in equation editor, and maintain the uniform size.
5. In this paper, the literature review is missing, so; current research is not sated in this paper. The authors need to discuss the literature study after the introduction. Authors are advised to add a comparative study with existing similar implementation; otherwise, the research's impact is not established.
6. Conflict of interest regarding article should be mention in the text.

Comments to Editor :

1. After modifying the content, paper can be accepted for possible publication.

Reviewer 3: --

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. It is advised to the authors that they need to disclose their proposed system provides the amount of accuracy in abstract and conclusion.
4. The total number of references are used in this paper is seven. In this particular topic, plenty of research is available, so authors need to provide at least 20 references, and all references should be sequentially/adequately arranged, as cited in the text.
5. The conclusion should be brief and short, which needs to specify the paper's aim and objective.
6. Conflict of interest regarding article should be mention in the text.

Comments to Editor :

1. After modifying the content, paper can be accepted for possible publication.

Regards
Editorial Manager

[Note: This is a computer-generated Report hence, no need of any Signature.]