

Cover letter for submission of a paper to the Journal of Robotics and Control (JRC)

Thai-Viet Dang
Ph.D, School of Mechanical Engineering
Hanoi University of Science and Technology, Hanoi, Vietnam

[08/06/2022]

Dear Editor of Journal of Robotics and Control (JRC),

I wish to submit a new manuscript entitled **“An Ultra Fast Semantic Segmentation Model for AMR’s Path Planning”** for consideration of publication in **Journal of Robotics and Control**.

I confirm that this work is original and has not been published elsewhere nor is it currently under consideration for publication elsewhere.

The paper provides a real-time solution to the issue of extracting corridor scenes from a single image. Using an ultra-fast semantic segmentation model to reduce the number of training parameters and the cost of computation. In addition, the mean Intersection over Union (mIoU) is 89%, and the high accuracy is 95%. To demonstrate the viability of the proposed method, the simulation results are contrasted to those of contemporary techniques. Finally, the authors employ the segmented image to construct the frontal view of the mobile robot in order to determine the available mobile robot path planning.

With these contributions, the paper should be of interest to readers in the areas of artificial intelligence in robotics and control and intelligent systems.

Please address all correspondence concerning this manuscript to me at viet.dangthai@hust.edu.vn.

Thank you for your consideration of this manuscript.

Sincerely,



Thai-Viet Dang