

Review Form

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Paper ID: CA-533

Paper Title: Enhancing Autopilot Vision in Foggy Conditions with Model-Level Fusion of Wind Data

Evaluation (X where appropriate)

	Exceptional	Very Good	Good	Fair	Poor
Relevance to the Conference	X				
Originality				X	
Appropriateness of the research/study method			X		
Innovation			X		
Relevance and clarity of graphics and tables		X			
Presentation		X			

Recommendation to Editors (Highlight your Recommendation)

Publish Unaltered

Publish in Minor, Required Changes

Publish After Major Changes

Reject (A Major Rewrite Is Required; Encourage Resubmission)

Reject (Paper is Seriously Flawed; Do Not Encourage Resubmission.)

Comments and Suggestions:

This paper presents a methodology aiming to enhance fog visibility by fusing satellite-based wind data with high-altitude fog imagery using a modified restormer model. The system is tailored for aerial imagery and leverages meteorological inputs at the model level. The methodology includes preprocessing pipelines for satellite imagery and ERA5 wind vectors, implementation of a dual-branch neural architecture, and a training strategy that aligns visual and environmental inputs. The topic is a popular one and deserves much research. But this paper has limited details of the methodology and even less results. Suggest to include at least some preliminary results for presentation.

It is suggested to cite the following references to enhance the background of your paper.

Takehito Ogata, "Monocular-Based Drivable Area Segmentation by Fusing 3-D and Texture Information," Journal of Image and Graphics, Vol. 9, No. 4, pp. 140-145, December 2021. doi: 10.18178/joig.9.4.140-145

Mohammed Hassoubah and Ganesh Sistu, "Data Driven 3D-Lane Detection Using Parallelism Loss Function," Journal of Image and Graphics, Vol. 12, No. 1, pp. 16-22, 2024.