

Building a road damage detection system from images using deep learning models

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Abstract: In the context of increasingly important traffic infrastructure management and maintenance, this topic focuses on building an automated system to detect road surface damage from images. The objective of the work is to provide a practical solution for infrastructure management agencies, helping to save time and costs in road surface quality inspection. The research method combines machine learning theory with practical application by using deep learning models to process and analyze images. The expected result is the enhancement of road maintenance performance through the ability to quickly and accurately detect road surface damage.

Keywords: Damage detection system, Deep learning model, Traffic infrastructure management