

Building a road damage detection model on embedded devices

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Abstract: In the context of increasingly developed traffic, ensuring road surface quality has become more important than ever. This topic focuses on the problem of detecting road surface damage quickly and accurately using embedded devices. The goal is to build a road damage prediction model to support more efficient traffic infrastructure management. The research method combines machine learning theory with experimental deployment on embedded devices, aiming to provide a practical application solution. The expected result is a road surface data analysis system that can automatically detect damage and provide early warnings to reduce the risk of traffic accidents.

Keywords: Road surface damage, embedded devices, machine learning model, transportation infrastructure management