

Research and evaluation of deep learning models for the problem of detecting surface cracks in structures.

Trinh Thu Phuong

Abstract: This topic focuses on researching and evaluating deep learning models for application in detecting cracks on building surfaces. In the context of increasing demand for safe and efficient maintenance of construction works, early crack detection is extremely important. The main objective of the topic is to build a system based on deep learning models to automate the crack detection process. The research method combines both theory and experimentation, including data collection, model design and training, as well as application deployment to test the system's effectiveness. The expected results will provide a useful solution for construction safety monitoring, contributing to the sustainable development of the construction industry.

Keywords: deep learning model, crack detection, construction works