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| Title | Bridge Crack Detection Using Dense Convolutional Network (DenseNet) | | |
| Author(s) Name | Nazia Alfaz, Abul Hasnat, Alvi Md. Ragib Nihal Khan, Nazmus Shakib Sayom, Abhijit Bhowmik | | |
| Contact Email(s) | nazia.alfaz@aiub.edu, hasnat.ce@iut-dhaka.edu, khan.alvi.md.ragib.nihal@gmail.com, sayom.ete@diu.edu.bd, abhijit@aiub.edu | | |
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| Abstract |  |
| Due to the increased volume of national, international, and even intercontinental transportations, it has been a critical responsibility for the road and transport authorities to ensure the safety of the transits. Bridges, in particular, require special maintenance because these are typically built in strategic locations, are more vulnerable to natural disasters, and can inflict more damage to life and property  if collapsed. In addition to being expensive and time-consuming, manual structure health monitoring (SHM) is also error-prone, but this is still the standard practice in many countries, especially in Bangladesh. This paper presents a deep learning approach to detect cracks in concrete bridge surfaces from images using Dense  Convolutional Network (DenseNet) with 99.83% detection accuracy to automate SHM, making it less expensive, efficient, and accurate. | |