

Surface Crack Detection Dataset

In this project, we study a dataset containing images of various concrete surfaces with and without crack. The images are divided into two classes as negative (without crack) and positive (with crack). There are in total 32137 images for training with 227 x 227 pixels with RGB channels (16070 images in the positive class and 16037 images in the negative class)

Visual crack inspection and detection plays a major role in building inspection and is a widely used method for determining the building health. The goal is to build a model to detect a crack for the test set. For each image in the test set, you must predict whether or not there is a crack (Positive or Negative) and submit your results on Canvas by 11:39 PM on Friday 12/13. You need to submit a csv file with two columns: image_id and set and predicted_class.

Accuracy Metric: Accuracy will be used to evaluate the model performance.

Reference: 2018 – Özgenel, Ç.F., Gönenç Sorguç, A. “Performance Comparison of Pretrained Convolutional Neural Networks on Crack Detection in Buildings”, ISARC 2018, Berlin.