

ABSTRACT

A method includes training a machine learning model using a training dataset including historical image data of a structure, the historical image data including a plurality of images of the structure. The training includes labeling regions of a source image of the plurality of images to create a source mask for the source image and providing as training input to the machine learning model the source image and a target image of the plurality of images. The training further includes receiving as output from the machine learning model a deformation field between the source image and the target image. The training further includes applying the deformation field to the source mask to create a warped source mask. The training further includes computing a loss associated with the warped source mask. The training further includes updating weights of the machine learning model based on the loss.