

ABSTRACT

Computer-implemented training method of training a map segmenter including a deep neural network, including: providing a training dataset including training image data including training pairs of map images of a geographical area acquired by one or more image acquisition apparatuses and corresponding segmentation masks, wherein the training image data may be stored a computer memory; generating synthetic map images by a computer-implemented generation method including creating synthetic map images by applying a generative adversarial network onto segmentation masks, wherein the segmentation masks may include the corresponding segmentation masks and additional segmentation masks; storing the synthetic map images and the corresponding additional segmentation masks as additional training data pairs in the training dataset in the computer memory; and training the map segmenter with the training dataset. Computer-implemented segmenting method for extracting a road network for use in vehicle routing with the trained segmenter, and a computer program product are also disclosed.

FIG. 1