Title (en)
METHOD AND SYSTEM FOR SEMANTIC SEGMENTATION INVOLVING MULTI-TASK CONVOLUTIONAL NEURAL NETWORK

Title (de)
VERFAHREN UND SYSTEM ZUR SEMANTISCHEN SEGMENTIERUNG MIT EINBEZIEHUNG EINES NEURONALEN FALTUNGSNETZES MIT MEHREREN TASKS

Title (fr)
PROCÉDÉ ET SYSTÈME DE SEGMENTATION SÉMANTIQUE CONCERNANT UN RÉSEAU NEURONAL CONVOLUTIF

Publication
EP 3698286 A4 20201223 (EN)

Application
EP 18913207 A 20181231

Priority
US 2018068172 W 20181231

Abstract (en)
[origin: WO2020142077A1] Methods and systems involving convolutional neural networks as applicable for semantic segmentation, including multi-task convolutional networks employing curriculum based transfer learning, are disclosed herein. In one example embodiment, a method of semantic segmentation involving a convolutional neural network includes training and applying the convolutional neural network. The training of the convolutional neural network includes each of training a semantic segmentation decoder network of the convolutional neural network, generating first feature maps by way of an encoder network of the convolutional neural network, based at least in part upon a dataset received at the encoder network, and training an instance segmentation decoder network of the convolutional neural network based at least in part upon the first feature maps. The applying includes receiving an image, and generating each of a semantic segmentation map and an instance segmentation map in response to the receiving of the image, in a single feedforward pass.

IPC 8 full level
G06N 3/04 (2006.01); **G06N 3/08** (2006.01); **G06T 1/20** (2006.01); **G06T 3/00** (2006.01); **G06T 7/11** (2017.01); **G06T 7/246** (2017.01)

CPC (source: EP)
G06N 3/045 (2023.01); **G06N 3/084** (2013.01); **G06T 7/11** (2016.12); G06T 2207/10016 (2013.01); G06T 2207/20081 (2013.01); G06T 2207/20084 (2013.01); G06T 2207/30261 (2013.01)

Citation (search report)
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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WO 2020142077 A1 20200709; EP 3698286 A1 20200826; EP 3698286 A4 20201223

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