Title (en)

LEARNING METHOD AND LEARNING DEVICE FOR IMPROVING IMAGE SEGMENTATION AND TESTING METHOD AND TESTING DEVICE USING THE SAME

Title (de)

LERNVERFAHREN UND LERNVORRICHTUNG ZUR VERBESSERUNG DER BILDSEGMENTIERUNG UND TESTVERFAHREN UND TESTVORRICHTUNG MIT VERWENDUNG DAVON

Title (fr)

PROCÉDÉ D'APPRENTISSAGE ET DISPOSITIF D'APPRENTISSAGE POUR AMÉLIORER LA SEGMENTATION D'IMAGES, PROCÉDÉ DE TEST ET DISPOSITIF DE TEST L'UTILISANT

Publication

EP 3467713 A8 20190605 (EN)

Application

EP 18192803 A 20180905

Priority

US 201715723597 A 20171003

Abstract (en)

A method for improving image segmentation by using a learning device is disclosed. The method includes steps of: (a) if a training image is obtained, acquiring (2- K)to (2-1)feature maps through an encoding layer and a decoding layer, and acquiring 1to Hlosses from the 1to the Hloss layers respectively corresponding to H feature maps, obtained from the H filters, among the (2-K)to the (2-1)feature maps; and (b) upon performing a backpropagation process, performing processes of allowing the (2-M)filter to apply a convolution operation to (M-1)-th adjusted feature map relayed from the (2-(M-1))filter to obtain M-th temporary feature map; relaying, to the (2-(M+1))filter, M-th adjusted feature map obtained by computing the Mloss with the M-th temporary feature map; and adjusting at least part of parameters of the (1-1)to the (1-K)filters and the (2-K)to the (2-1)filters.

IPC 8 full level

G06K 9/62 (2006.01); **G06K 9/46** (2006.01)

CPC (source: CN EP KR US)

G06K 9/4628 (2013.01 - EP); **G06K 9/627** (2013.01 - EP); **G06N 3/0454** (2013.01 - CN); **G06N 3/084** (2013.01 - CN); **G06T 3/40** (2013.01 - KR); **G06T 5/20** (2013.01 - KR); **G06T 7/10** (2017.01 - KR); **G06T 7/11** (2017.01 - CN EP); **G06T 7/12** (2017.01 - US); **G06T 7/194** (2017.01 - US); G06T 2207/20024 (2013.01 - KR); G06T 2207/20081 (2013.01 - CN EP KR); G06T 2207/20084 (2013.01 - CN EP US); G06T 2207/20112 (2013.01 - US)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 9947103 B1 20180417; CN 109598725 A 20190409; EP 3467713 A1 20190410; EP 3467713 A8 20190605; JP 2019067403 A 20190425; JP 6720264 B2 20200708; KR 102144381 B1 20200813; KR 20190039383 A 20190411

DOCDB simple family (application)

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