

Title (en)

CHARACTERIZING ACTIVITY IN A RECURRENT ARTIFICIAL NEURAL NETWORK AND ENCODING AND DECODING INFORMATION

Title (de)

CHARAKTERISIERUNG VON AKTIVITÄTEN IN EINEM WIEDERKEHRENDE KÜNSTLICHEN NEURONALEN NETZ SOWIE CODIERUNG UND DECODIERUNG VON INFORMATION

Title (fr)

CARACTÉRISATION DE L'ACTIVITÉ DANS UN RÉSEAU NEURONAL ARTIFICIEL RÉCURRENT ET CODAGE ET DÉCODAGE D'INFORMATIONS

Publication

EP 3803699 A1 20210414 (EN)

Application

EP 19728962 A 20190605

Priority

- US 201816004635 A 20180611
- US 201816004837 A 20180611
- US 201816004796 A 20180611
- US 201816004757 A 20180611
- US 201816004671 A 20180611
- EP 2019064593 W 20190605

Abstract (en)

[origin: WO2019238523A1] Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for characterizing activity in a recurrent artificial neural network and encoding and decoding information. In one aspect, a method that is implemented by one or more data processing devices can include receiving a training set that includes a plurality of representations of topological structures in patterns of activity in a source neural network and training a neural network using the representations either as an input to the neural network or as a target answer vector. The activity is responsive to an input into the source neural network.

IPC 8 full level

G06N 3/00 (2006.01); **G06N 3/04** (2006.01); **G06N 3/08** (2006.01); **G06N 5/00** (2006.01)

CPC (source: EP KR)

G06N 3/006 (2013.01 - EP KR); **G06N 3/008** (2013.01 - EP); **G06N 3/044** (2023.01 - EP KR); **G06N 3/045** (2023.01 - EP KR);
G06N 3/049 (2013.01 - EP KR); **G06N 3/082** (2013.01 - EP KR); **G06N 5/01** (2023.01 - EP KR)

Cited by

US11580401B2; US11569978B2; US11652603B2; US11797827B2; US11972343B2; US11816553B2; US11615285B2; US11651210B2;
US11893471B2

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)

WO 2019238523 A1 20191219; CN 112567387 A 20210326; CN 112567388 A 20210326; CN 112567389 A 20210326;
CN 112567390 A 20210326; CN 112585621 A 20210330; EP 3803699 A1 20210414; EP 3803705 A1 20210414; EP 3803706 A1 20210414;
EP 3803707 A1 20210414; EP 3803708 A1 20210414; KR 102465409 B1 20221109; KR 102475411 B1 202221207; KR 102488042 B1 20230112;
KR 102497238 B1 20230207; KR 102526132 B1 20230426; KR 20210008417 A 20210121; KR 20210008418 A 20210121;
KR 20210008419 A 20210121; KR 20210008858 A 20210125; KR 20210010894 A 20210128; TW 202001693 A 20200101;
TW I822792 B 20231121; WO 2019238483 A1 20191219; WO 2019238512 A1 20191219; WO 2019238513 A1 20191219;
WO 2019238522 A1 20191219

DOCDB simple family (application)

EP 2019064776 W 20190606; CN 201980053140 A 20190606; CN 201980053141 A 20190606; CN 201980053463 A 20190606;
CN 201980053465 A 20190605; CN 201980054063 A 20190606; EP 19728962 A 20190605; EP 19728989 A 20190606;
EP 19728990 A 20190606; EP 19728992 A 20190606; EP 19728993 A 20190606; EP 2019064593 W 20190605; EP 2019064740 W 20190606;
EP 2019064741 W 20190606; EP 2019064773 W 20190606; KR 20207035843 A 20190605; KR 20207035844 A 20190606;
KR 20207035845 A 20190606; KR 20207035846 A 20190606; KR 20207035847 A 20190606; TW 108119813 A 20190606