

Title (en)

A PARZEN WINDOW FEATURE SELECTION ALGORITHM FOR FORMAL CONCEPT ANALYSIS (FCA)

Title (de)

PARZENFENSTERMERKMALSAUSWAHLALGORITHMUS ZUR FORMALEN KONZEPTANALYSE

Title (fr)

ALGORITHME DE SÉLECTION DE CARACTÉRISTIQUES DE FENÊTRE DE PARZEN D'ANALYSE FORMELLE DE CONCEPTS (FCA)

Publication

EP 3326118 A4 20190327 (EN)

Application

EP 16828171 A 20160510

Priority

- US 201514807083 A 20150723
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- US 2016031644 W 20160510

Abstract (en)

[origin: WO2017014826A1] Described is a system for feature selection for formal concept analysis (FCA), A set of data points having features is separated into object classes. For each object class, the data points are convolved with a Gaussian function, resulting in a class distribution curve for each known object class. For each class distribution curve, a binary array is generated having ones on intervals of data values on which the class distribution curve is maximum with respect to all other class distribution curves, and zeroes elsewhere. For each object class, a binary class curve indicating for which interval a performance of the known object class exceeds all other known object classes is generated. The intervals are ranked with respect to a predetermined confidence threshold value. The ranking of the intervals is used to select which features to extract from the set of data points in FCA lattice construction.

IPC 8 full level

G06N 5/04 (2006.01); **G06N 5/02** (2006.01); **G06N 20/10** (2019.01)

CPC (source: CN EP US)

G06N 3/02 (2013.01 - CN EP US); **G06N 5/022** (2013.01 - EP); **G06N 20/00** (2018.12 - CN); **G06N 20/10** (2018.12 - EP)

Citation (search report)

- [I] "Serious Games", vol. 7278, 7 May 2012, SPRINGER INTERNATIONAL PUBLISHING, Cham, ISBN: 978-3-642-37803-4, ISSN: 0302-9743, article DOMINIK ENDRES ET AL: "Understanding the Semantic Structure of Human fMRI Brain Recordings with Formal Concept Analysis", pages: 96 - 111, XP055552207, 032682, DOI: 10.1007/978-3-642-29892-9_13
- [A] DAVID ERNESTO CARO-CONTRERAS ET AL: "Computing the Concept Lattice using Dendritcal Neural Networks", 5 June 2013 (2013-06-05), XP055556089, Retrieved from the Internet <URL:http://ceur-ws.org/Vol-1062/paper12.pdf> [retrieved on 20190213]
- [A] STÉPHANIE GUILLAS ET AL: "Concept lattices: a tool for primitives selection?", 1 January 2005 (2005-01-01), France, XP055556117, Retrieved from the Internet <URL:http://documents.irevues.inist.fr/bitstream/handle/2042/4397/08-Guillas%20et%20al%20couleur.pdf?sequence=1> [retrieved on 20190213]
- See references of WO 2017014826A1

Designated contracting state (EPC)

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