

Kk

- K Audit:** the knowledge of knowledge assets and a rich source of information about the strengths of an organization (Chong & Chong, 2009)
- K Closest Pairs Query:** a spatial query that involves two spatial datasets and a cardinality threshold K ($K=1$). It discovers the K distinct pairs of objects from the two input datasets that have the K smallest distances between them. (Corral & Vassilakopoulos, 2009)
- K Map:** a snapshot of where an organization is at any given time relative to its competitors (Chong & Chong, 2009)
- k Nearest Neighbor Query:** a query of finding k entities (data elements) among a group of entities that is nearest (according to a distance function) to a given (query) entity (Vassilakopoulos, 2009)
- K Nearest Neighbors Join:** a spatial query involving two spatial datasets and a cardinality threshold K ($K=1$). The answer is a set of pairs from the two input datasets that includes, for each of the spatial objects of the first dataset, the pairs formed with each of its K nearest neighbors in the second dataset. (Corral & Vassilakopoulos, 2009)
- K-Bucket:** a list of a node's neighbors in the Kademlia overlay (Czirkos & Hosszú, 2009b)
- k-Connected Network:** a network where all nodes in the network remain connected to each other when k nodes are removed (Wong et al., 2008)
- K-Connectivity:** given any pair of wireless devices (nodes), there are at least k disjoint paths to connect them (Wang, 2008e)
- k-Coverage:** a sensor network where every location is covered by at least k different sensor nodes, that is, every location is within the sensing range of at least k different sensor nodes (Wang, 2008e)
- K-Cross-Validation:** a method to estimate the accuracy of a classifier system. In this approach, the dataset, D , is randomly split into K mutually exclusive subsets (folds) of equal size (D_1, D_2, \dots, D_k) and K classifiers are built. The i -th classifier is trained on the union of all $D_j \propto j \neq i$ and tested on D_i . The estimate accuracy is the overall number of correct classifications divided by the number of instances in the dataset. (Paz Sesmero Lorente et al., 2009)

K-Means Algorithm: an algorithm to cluster n objects based on attributes into k partitions, $k = n$. The algorithm minimizes the total intra-cluster variance or the squared error function. (Tsalikakis, Karvelis, & Fotiadis, 2009)

K-Means Clustering: the most well-known partition-based clustering algorithm. The algorithm starts by choosing k initial centroids, usually at random. Then the algorithm alternates between updating the cluster assignment of each data point by associating it with the closest centroid and updating the centroids based on the new clusters until convergence. Objects are grouped into a fixed number (k) of partitions so that the partitions are dissimilar to each other. (Wee-Chung Liew, Law, & Yan, 2009; Udoh & Bhuiyan, 2009)

K-Nearest Neighbor Algorithm (K-NN): a method for classifying objects based on closest training examples in the feature space (Sabzevari et al., 2008)

K-Nearest Neighbor Query: the query that finds the k data points that are closest to the query point in terms of their distance to the query point. No other data points are closer to the query point than these k data points. The distance between a query point and a data point can be computed based on Euclidean distance metrics or network distance (if a spatial network is included). (Huang, 2009a)

k-Neighbor Connected Network: a network where all nodes have at least k neighboring nodes for communication (Wong et al., 2008)

K-NN: see *K-Nearest Neighbor Algorithm*

K2 Algorithm: a score-based algorithm in Bayesian network. It recovers the underlying

graphic structure based on a predetermined order of nodes in a greedy fashion. (Dai et al., 2010)

Kalman Filter Matrix (KFM): a (normally 2-dimensional) matrix of neurons, each of which contains a vector of attributes. Two neurons are called similar if the (Euclidian) distance of their attribute vectors is below a given threshold. Two neurons are called neighbored if they are next to each other regarding the given net topology (see Kohonen, 1995). (Perl, 2009)

KAoS: a multi-paradigm specification language with a two-level structure: an outer semantic net layer for declaring concepts, their attributes, and links to other concepts and an inner formal assertion layer for formally defining the concept (Kaviani, Gasevic, & Hatala, 2009)

Karhunen-Loeve: the mathematical techniques equivalent to Principal Component Analysis transform aiming to reduce multidimensional data sets to lower dimensions for analysis of their variance (Bueno García et al., 2009)

KB: see *Knowledge Base*

Keiretsu: a type of network organization that can be considered as an affiliate enterprise with interlocking business and shareholdings relationships (Jackson & Klobas, 2008)

Kernel: the most complicated and most important part of the operating systems. It contains a static part that is used any time the program works and modules that are loaded in case of their need. After loading, a module extends the capabilities of the kernel and becomes its part until unloaded. It is the similarity measure between different members of a data set that is used together with a mapping

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/kk/76420

Related Content

A Comparison of Data Modeling in UML and ORM

Terry Halpin (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 613-618).
www.irma-international.org/chapter/comparison-data-modeling-uml-orm/13638

Triune Continuum Paradigm

Andrey Naumenko (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 3821-3835).
www.irma-international.org/chapter/triune-continuum-paradigm/14147

Intrusion Detection Based on P2P Software

Zoltán Czirkos and Gábor Hosszú (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 2232-2238).
www.irma-international.org/chapter/intrusion-detection-based-p2p-software/13891

When Users Enjoy Using the System: The Case of AIS

Emad Ahmed Abu-Shanab and Ines Ben Salah (2022). *Journal of Information Technology Research* (pp. 1-15).
www.irma-international.org/article/when-users-enjoy-using-the-system/299952

Classification of Brain Hemorrhages in MRI Using Naïve Bayes- Probabilistic Kernel Approach

Nita Kakhandaki, Shrinivas B. Kulkarni, Ramesh K. and Umakant P. Kulkarni (2019). *Journal of Cases on Information Technology* (pp. 51-65).
www.irma-international.org/article/classification-of-brain-hemorrhages-in-mri-using-naive-bayes--probabilistic-kernel-approach/227678