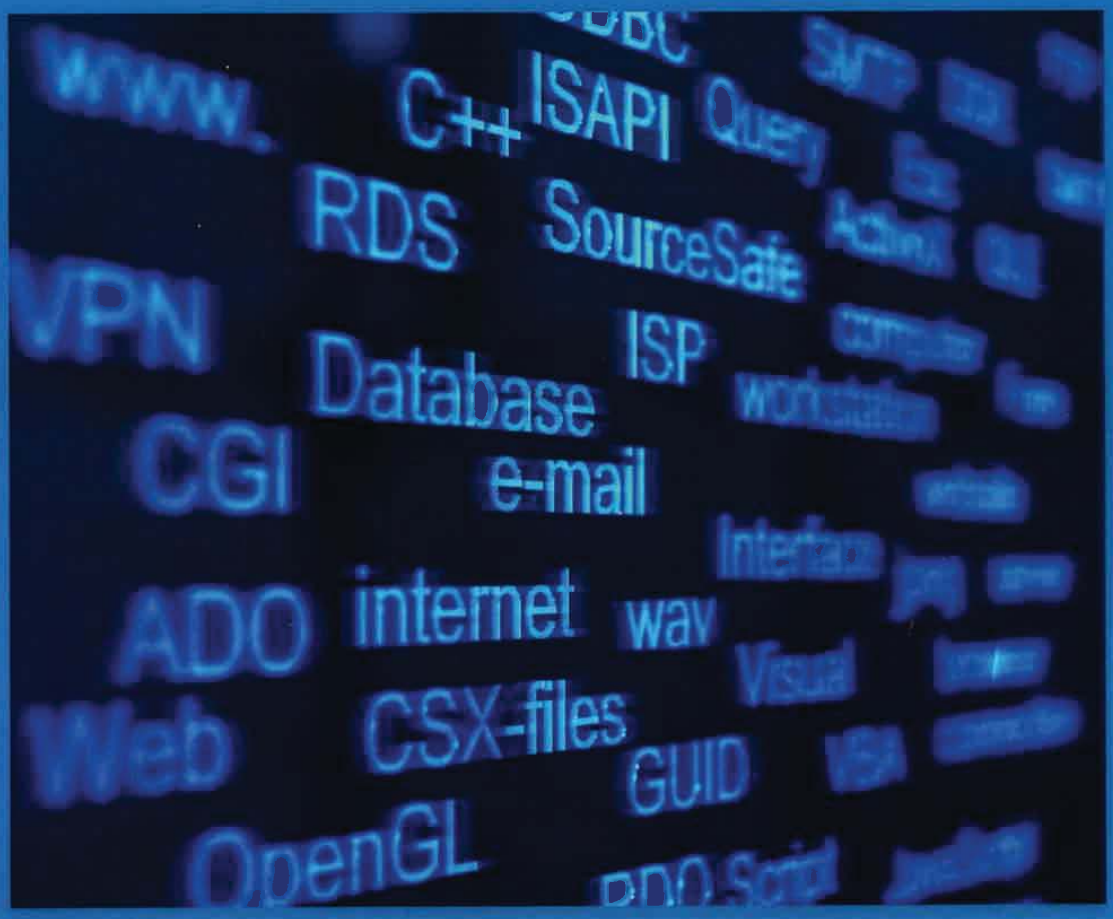
Dictionary of Information Science and Technology

Second Edition



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Volume I

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Current literature uses the term to describe the potential for reusable learning objects to overtake previous forms of course content development and management. (Chyung & Swanson, 2009)

Dissimilarity Data: the data in which all we know about the observations are pair-wise dissimilarities (Ho-Phuoc & Guerin-Dugue, 2009)

Dissimilarity SOM: a SOM where all observations are described by a dissimilarity matrix (Ho-Phuoc & Guerin-Dugue, 2009)

Distance Education Online: the classrooms where the students and the instructor are separated from each other in time and space. Other terms that also refer to online distance education include Internet-based education and Web-based education. The primary means of delivery for online distance education is the Internet, with materials available to students 24 hours a day, seven days a week. (Lear, 2009a)

Distance Education Tools: the software applications that are used for the design, implementation and delivery of course materials; also includes software applications for distance education administration, communication during a distance education session and student performance assessment (Yee, 2009a)

Distance Function: the similarity between two objects. It is usually normalized in the range between 0 to 1. Examples of distance functions used for time series data are the Euclidean distance and the Time Warping distance. (Kontaki, Papadopoulos, & Manolopoulos, 2009)

Distance Graph: the LDPC code matrices such that graph vertices that represent rows and edges are columns (Yahya et al., 2012)

Distance Vector Routing: a routing algorithm that requires that each router simply inform its neighbours of its routing table. The opposite is a link-state routing algorithm. (Gutiérrez, Pardo, & Kloos, 2008)

Distibutional Equivalency: the property of a distance that allows to group two modalities of the same variable having identical profiles into a new modality weighted with the sum of the two weights (Rousset & Giret, 2009a)

Distinctive Competence: a function of the commitments of organisational groupings and social actors to develop and apply business and IT capabilities and resources to deliver services that are of value to customers (Butler & Murphy, 2009)

Distinguishing Authorship: a process to determine whether two pieces of anonymous content are from the same author or not (Chen et al., 2010)

Distractors: the incorrect answers in the list of options of a multiple choice item (Costagliola, Ferrucci, & Fuccella, 2009)

Distributed: 1. the placing of data, components, and processes across a geography or network to limit dependency on a single, large system (Dietrich & Bell, 2011) **2.** Nodes in a network or system making local decisions to perform tasks without using a centralized infrastructure. (Egashira, Enomoto, & Suda, 2010) **3.** where the distributed network management is shared by several entities. When these entities are not a subset but all the network entities then we talk about fully-distributed networks. Fully-distributed networks are often based on peer-to-peer (P2P) relations where users communicate in an ad-hoc manner. (Hernández-Serrano et al., 2010)

Distributed & Collaborative Reputation Mechanisms: the mechanisms establish trust by exploiting learning from experience concepts in order to obtain a reliability value of system participants in the form of ratings. Collaborative algorithms attempt to determine ratings for a collection of entities, given a collection of opinions that those entities hold about each other. (Louta & Michalas, 2010)

Distributed Agents: the software entities designed to execute as independent threads and on distributed processors, capable of acting autonomously in order to achieve a pre-defined task (Tait & Schaefer, 2009)

Distributed Application: an application composed of distinct components running in separate runtime environments, usually on different platforms connected via a network (Karoui, 2009)

Distributed Artificial Intelligence: a sub-field of artificial intelligence concerned with systems that consist of multiple independent entities that interact in a domain (Stanek et al., 2008a)

Distributed Collaboration: a VR that has been employed to allow geographically distributed people to do more than simply hear and see each other. For instance, VR technology is being used to develop highly interactive shared virtual environments, graphically orientated, for local and distance training and learning. (Rodrigues, 2009)

Distributed Component Object Model (DCOM): a proprietary Microsoft technology for communication among software components distributed across networked computers. DCOM extends Microsoft's COM and provides the communication substrate under Microsoft's COM+ application server infrastructure. (Roa-Valverde, Navas-Delgado, & Aldana-Montes, 2009)

Distributed Computing: a system where tasks are divided among multiple computers rather than having all processes originating from one main central computer. Client/server systems are one type of distributed computing. It can also be described as a system in which services are provided by teams of computers collaborating over a network. (Curran et al., 2008b)

Distributed Computing Systems (DCS): the networked processors, each with its own memory, that communicate with each other by sending messages (Tilak, 2009)

Distributed Contributions: the practice of leveraging the willing participation of users (Dinger & Grover, 2010)

Distributed Control: a control paradigm for multirobot systems whereby every robot participates in the team's decisions, in the absence of any central controller or hierarchy (Rocha & Dias, 2008)

Distributed Coordination Function (DCF): an operation of IEEE802.11MAC that provides the distributed medium access mechanism (Kettaf, Abouaissa, & VuDuong, 2009)

Distributed Data Sources: a distributed setting where the data are distributed across several data sources. Each data source contains only a fragment of the data. This leads to a fragmentation of a data. Two common types of data fragmentation are horizontal fragmentation, wherein (possibly overlapping) subsets of data tuples are stored at different sites; and vertical fragmentation, wherein (possibly overlapping) subtuples