CA: See Certificate (or Certification) Authority; Conditional Access Service.

CAAT: See Computerized Assisted Auditing Technique.

Cable Access
A form of broadband access using a cable modem attached to a cable TV line to transfer data. (Hentea, 2005a)

Cache
1: A region of a computer’s memory which stores recently or frequently accessed data so that the time of repeated access to the same data can decrease. (Lin et al., 2005) 2: Disk space used to store the documents loaded from the server for future use. (Kacimi et al., 2005) 3: A storage area on the user computer’s hard disk where recently viewed Web pages are stored. (Dasgupta & Chandrashekaran, 2005) 4: Memory that mirrors often-used parts of a slower but larger memory. The term cache mainly refers to the function, not to the memory technology. Cache can be standard random access memory that is used to speed up disk access, but it also can be very specialized high-speed memory that is used to speed up processor access to main memory. (Meixner, 2005)

Cache Invalidation
The procedure of validating whether the cached data is consistent with the master copy at the server. (Xu, 2006)

Cache Memory
A technology developed to reduce file download time and maximize network performance. (Szewczak, 2005)

Cache Replacement
The procedure of finding the victim data item(s) to be dropped from the cache in order to allocate sufficient cache space for an incoming data item. (Xu, 2006)

Cache Replacement Policy
The policy to choose a data item or object to be deleted from the cache when a new data item or object is stored to a full cache. (Tse, 2006)

Cache Result
The Result of a group-by is obtained from other group-by computation (in memory). (Tan, 2005a)

Caching
1: A replication method where access to frequently used data is optimized. In remote caching, a primary copy of the frequently used data is normally stored on a very fast medium to optimize access to data. In local caching, an often inconsistent secondary copy of the frequently used data is stored in or close to the location of some users to optimize their access to the data. (Frank, 2005a) 2: The technique of copying data from a server machine (the central storage place) to a client machine’s local disk or memory; users then access the copy locally. Caching reduces network load because the data does not have to be fetched across the network more than once (unless the central copy changes). (Bose et al., 2005) 3: Using a buffer within your own computer’s fast memory to hold recently accessed data. Designed to speed up access to the same data later. (Cosemans, 2005b)

Caching Proxy
A caching proxy or proxy server or proxy is a server that acts as an intermediary between a client and a content server. It intercepts the requests of the client and checks whether it can serve the client from its own cache, and if not, it forwards the requests to the content server. (Katsaros & Manolopoulos, 2005a)

CAD: See Computer-Aided Design.

CAFS: See Content-Addressable File Store.

CAGR: See Cumulative Annual Growth Rate.

Calculative Trust
Trust based on the weights of the costs and benefits of certain actions, and on a view of man as a rational actor. (Huotari & Iivonen, 2005)

Calculative-Based Trust
Trust based on the calculation that it is not in the best interest of the trusted party to cheat or take advantage of the situation, regardless of his or her trustworthiness. (Paravastu & Gefen, 2006)

Calculus-Based Trust (CBT)
Trust that is grounded in both the fear of punishment and the rewards for preserving the trusting relationship. (Wang & Gwebu, 2006)

Calibration
Correspondence between accuracy and confidence. Calibration exists when there is correspondence. (Goldsmith & Pillai, 2006)


Call-Back Locking (CBL)
An avoidance-based protocol that supports inter-transactional page caching. Transactions executing under an avoidance-based scheme must obey the read-once write-all (ROWA) replica management approach, which guarantees the correctness of data from the client cache by enforcing that all existing copies of an updated object have the same value when an updating transaction commits. (Parker & Chen, 2005)


CAM: See Computer-Aided Manufacturing.

Camera Calibration
A process of setting digital imaging components to standardized settings that will produce accurate and predictable results in the output. (Ozer et al., 2005)

Cancelable Biometrics
A technique that allows the user to choose non-invertible transformation functions to be operated on his/her original biometric sample in order to generate multiple variants to represent the same person. (Li, 2006)

Candidate Generation
Creating new subgraphs out of smaller ones; then it checks to see how often this new subgraph appears in the analyzed graph database. (Fischer & Meinl, 2005)

Candidate Key
Minimum set of attributes that uniquely identify each tuple of a given relation. One candidate key is selected as the primary key. (Alhajj & Polat, 2005a)

CAP: See Carrierless Amplitude-Phase.

Capability
Any method, tool, or piece of knowledge that supports the achievement of a goal. (Berztiss, 2006a)

Capability Differential
Resource and competence configuration, that is to say, a configuration to reach competitive advantage sources. (Cepeda-Carrion, 2006)

Capability Maturity Model (CMM)
1: A framework to achieve maturity in project activities in the software field which presents five maturity levels, each corresponding to a set of structural requirements for key process areas. (Monteiro de Carvalho et al., 2005)
2: A methodology used to evaluate an organization’s software development process. The model describes a five-level evolutionary path of increasingly organized and systematically more mature processes. (Hawk & Kaiser, 2005) 3: A model used to assess the capability and the maturity of a software process. The CMM levels range from 1 (initial, ad hoc) to 5 (optimizing, process improvement). (Gaffar & Seffah, 2005) 4: A model containing the essential elements of effective processes for one or more disciplines. Also describes an evolutionary improvement path from ad hoc, immature processes to disciplined, mature processes with improved quality and effectiveness. (Gibson, 2005) 5: Developed at the Software Engineering Institute of Carnegie-Mellon University and also known as CMM-SW, this model helps a software development organization to identify its strengths and weaknesses, and provides a well-defined plan for improvement. (Berztiss, 2006a) 6: A five-level framework laying out a generic path to process improvement for software development in organizations. (Brewer, 2005) 7: A suite of models that update and upgrade the CMM. (Berztiss, 2006a)