GA: See Genetic Algorithm.

GAAP: See Generally Accepted Accounting Principles.

GADP: See General Additive Data Perturbation.

Gait Analysis
Analysis of human walking patterns. It is used to analyze abnormality in lower limb problems and assess treatment or intervention outcomes. (Begg, 2005)

Galaxy Structure
Structure of a warehouse for which two different types of facts share a same dimension. (Schneider, 2005)

Galois Lattice
Provides some meanings to analyze and represent data. Refers to two-ordered set. An ordered set (I,#) is the set I, together with a partial ordering # on I. (Nigro & González Cisaro, 2005c)

Gambling
A leisure activity in which money is staked with the anticipation of making a gain and/or winning a prize. (Brindley, 2006)

Game
A simulation in which people are part of the model and their decisions partially determine the outcome. (Pendegraft, 2005)

Game Building
Stage in Gaming and Simulation. During the building stage, game constructors make a model of the problem they want to incorporate into the game. Next, they transform the model into a specific game, and finally they define different scenarios that can be played during the game. (Achterbergh, 2005a)

Game Theory
Mathematical theory of rational behavior for situations involving conflicts of interest. (Heucke et al., 2005)

Game User Interface
Elements and devices through which the user interacts with the game. (Ip & Jacobs, 2006)

Game Using
Stage in Gaming and Simulation. During the using stage, game facilitators make preparations for playing the game, and participants actually play the game (given a certain scenario). (Achterbergh, 2005a)

Gaming and Simulation
The process of building and using simulation games as a means to deal with complex problems. See also Simulation Game. (Achterbergh, 2005a)

Gantt Chart
A chart displaying schedule information in a graphical form. It may display tasks, duration, start/finish dates for activities and milestones, dependencies, and allocated resources. (Asprey, 2005)

Gap/Racial Gap
Inequality of access to media and technology based on ethnicity. (Reilly, 2005)

Gathering
An event where participants share their knowledge with the group on a particular topic. A gathering focuses exclusively on occupational knowledge and encourages an evaluation of the legitimacy of other peoples’ contributions. A gathering is unlike a brainstorm, which discourages evaluation and encourages ‘wild and wacky’ ideas. Following a gathering, facilitated group discussion is conducted on the contributions shared. (Shaw, 2006)
Gaze
An eye-tracking metric, usually the sum of all fixation durations within a prescribed area. Also called dwell, fixation cluster, or fixation cycle. (Poole & Ball, 2006)

Gaze Tracking
The set of mechanisms allowing the recording and analysis of human eye-gaze. Gaze tracking is normally motivated by the assumption that the locus of eye-gaze may, to some extent, correspond to the locus of attention, or it can help capture user interests. Several techniques exist for eye tracking varying in their level of intrusion (from requiring the user to wear special lenses to just having camera-like devices installed on the computer), their accuracy, and ease to use. Normally devices need to be calibrated before use (some systems allow memorized calibrations for specific users). (Thomas & Roda, 2006a)

GCI: See Growth Competitiveness Index; Group Competitiveness Index.

GCSS: See Group Communication Support System.

GDB: See Geographic Database.

GDP: See Gross Domestic Product.

GDSS: See Group Decision Support System.

GDT: See Geographically Dispersed Team.

Gender Divide
The term broadly used to indicate the difference between males and females that have ready accessibility to information and technology, and the skills to use information and technology, and those males and females who do not have the same or similar level of accessibility to information and technology, and the skills to use information and technology. (Arthur-Gray & Campbell, 2005)

Gene
1: A hereditary unit consisting of a sequence of DNA that contains all the information necessary to produce a molecule that performs some biological function. (Yu & Liu, 2005) 2: The unit of heredity. A gene contains hereditary information encoded in the form of DNA and located at a specific position on a chromosome in a cell’s nucleus. Genes determine many aspects of anatomy and physiology by controlling the production of proteins. Each individual has a unique sequence of genes, called genetic code. (Galitsky, 2005a)

Gene Expression
1: Describes how the information of transcription and translation encoded in a segment of DNA is converted into proteins in a cell. (Fung & Ng, 2005) 2: Production of mRNA from DNA (a process known as transcription) and production of protein from mRNA (a process known as translation). Microarrays are used to measure the level of gene expression in a tissue or cell. (Fu, 2005) 3: The proteins actually produced in a specific cell by an individual. (Liberati et al., 2005)

Gene Expression Microarray
One of a number of silicon chips that simultaneously measure the expression levels of thousands of genes. (Yu & Liu, 2005)

Gene Expression Profile
Through microarray chips, an image that describes to what extent genes are expressed can be obtained. It usually uses red to indicate the high expression level and uses green to indicate the low expression level. This image is also called a gene expression profile. (Chu & Wang, 2005)

Gene Microarray Data
Measurements of mRNA abundances derived from biochemical devices called microarrays. These are essentially measures of gene activity. (Mukherjee, 2005)

General Additive Data Perturbation (GADP)
A general form of Additive Data Perturbation techniques. This method is based on the idea that the relationships between the confidential and non-confidential attributes should be the same before and after perturbation of the confidential attributes has occurred. Designed both to eliminate all forms of statistical bias found in other additive methods and to provide for the highest level of security of all data perturbation techniques. (Wilson et al., 2006b)

General Knowledge
The contextual knowledge that goes across or is shared by particular individuals, groups, societies, times, and locations. General knowledge can be tacit or explicit. (Medeni, 2006a)