**Xx**

**x:** the sensor signal vector (Parmar & Unhelkar, 2009)

**X-PDL:** a language defined and standardized by the Workflow Management Coalition (WFMC) to describe business processes. X-PDL is vendor-independent, and aims at becoming a standard way for exchanging process definitions among WfMSs from different vendors. (Combi & Pozzi, 2008a)

**X-Ray Crystallography:** the scientific method most commonly used to determine molecular structures. Individual molecules cannot be seen under a light microscope because the wavelength of visible light is larger than the molecular size. However, crystals are made up of an array of many (~1011-1012) identical, regularly-spaced molecules, and the regular spacing allows a technique called X-ray diffraction to be used to “see” the molecules that comprise the crystal. (Miller & Weeks, 2009; Combi & Pozzi, 2008)

**X.509:** an ITU-T standard for a public key infrastructure (PKI) and Privilege Management Infrastructure (PMI). X.509 specifies, amongst other things, standard formats for public key certificates, certificate revocation lists, attribute certificates, and a certification path validation algorithm. (Scifo, 2009)

**X3D:** an Open Standards XML enabling 3D file format, real-time communication of 3D data across all applications, and network applications (Swierzowicz, 2009)

**XACML:** see eXtensible Access Control Markup Language

**XACT:** an audio library, audio engine, and front-end GUI for incorporating audio elements into an XNA© Project. It is designed for Microsoft™ platforms. (Neff & Pitt, 2011)

**XBRL Specification:** a set of technical rules that define the structure of a given version of XBRL (Martins & Rodrigues, 2008)

**Xdelta:** a tool that computes the differences between two versions of the same file, providing the possible to downgrade the latest version to a previous one (Milanesi, Merelli, & Trombetti, 2009)

**xDDL:** the family of technologies that provide high-speed digital data transmission over the PSTN (Korsakaite & Lamanaukas, 2008b)
Xenomai: a technology that aims at helping application designers relying on traditional RTOS to move as smoothly as possible to a GNU/Linux-based execution environment, without having to rewrite their application entirely (Gontran, 2009)

XFrames: an XML application for composing documents together, replacing HTML Frames. By being a separate application from XHTML, it allows content negotiation to determine if the user agent accepts frames; by encoding the “population” of frames in the URI, it allows framesets to be bookmarked. XFrames allows similar functionality to HTML Frames, with fewer usability problems, principally by making the content of the frameset visible in its URI. (Moreno, 2008b)

XHTML 2.0: a general purpose markup language designed for representing documents for a wide range of purposes across the World Wide Web. To this end, it does not attempt to be all things to all people, supplying every possible markup idiom, but to supply a generally useful set of elements, with the possibility of extension using the class and role attributes on the span and div elements in combination with style sheets, and attributes from the metadata attributes collection. (Moreno, 2008b)

xi: the ith sensor output (Parmar & Unhelkar, 2011)

xIMS SS (Simple Sequencing): a specification that outlines the route a learner can take through a particular unit of instruction, based on previous actions and behavior within a unit (Munro & Kenny, 2009)

XML: see Extensible Markup Language

XML Cluster Representative: a prototype XML document capturing the most relevant features of the XML documents assigned to a cluster (Tagarelli, 2009)

XML Database: a database designed for managing and manipulating XML documents or even more generic SGML documents (Chen, 2009h)

XML Document: a document consisting of an (optional) XML declaration, followed by either an (optional) DTD or XML schema, and then followed by a document element. XML documents are case sensitive. XML schema specifies the XML structure of the document made up of XML elements. (Chen, 2009h; Landryová & Babiuch, 2009)

XML for Website Management: the use of XML to manage website content; accomplished by separating content from style, which allows publication of content in various formats (Baker et al., 2008)

XML Frequent Content Mining: the mining for frequently occurring values which are instances of a relation in the XML document (Nayak, 2009)

XML Frequent Patterns Mining: the mining of XML documents for frequent patterns which are either structural or content-oriented or a combination of both (Kutty, 2009)

XML Frequent Structures Mining: the identification of frequently occurring structures in the schema (e.g. DTD (Document Type Definition), XML Schema), which describes the structure of an XML document (Kutty, 2009)

XML Grammar: a structure specifying the elements and attributes of an XML document, as well as how these elements/attributes