A Virtual Library for BITS Meetings

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Motivation

Grev literature is a body of materials that cannot be found easily through conventional channels such as publishers. It is "frequently original and usually recent". It is a source of information that can only be exploited in a very limited way. Within grey literature, thesis, scientific reports, white papers, workshops' abstracts, are included. Grey literature can in fact hide data that can be of extreme interest. For this reason, many attempts are carried out to make this literature publicly available on-line and anyway easily reachable. The Bioinformatics Italian Society has a long tradition of scientific meetings and related contributions (either abstracts, extended abstracts and papers) have only been published in a very limited portion. The first annual meeting, called Biocomp, of the Italian interest group in bioinformatics (Gruppo di Cooperazione "Bioinformatica" - GCB) of the Italian Society of Biophysics and Molecular Biology was held in 1998, while the first annual meeting of the Bioinformatics Italian Society - BITS was held in 2004. The books of abstracts of these meetings were made available to participants in print format only and, in a few cases, in electronic format in the web site of the meeting. As a result, these documents are not currently all available and not in a unique reference site. The Virtual Library for BITS Meetings is a web system that makes it available in a unique site all contributions submitted to Biocomp and BITS annual meetings since 1998. It makes it possible to browse lists of contributions, search the archive by author, title, and abstract contents and to retrieve contributions in PDF format.

Methods

The Virtual Library for BITS Meetings is based on Librarian version 1.3, a free tool for self-creation of virtual annotated library of PDF articles, designed for small trusted groups like science labs and delivered under the GPL license schema (see http://www.bioinformatics.org/librarian/). It was developed in PHP 4 by Martin Kucej, and it requires MySQL database management system and the Apache web server environment. Librarian was adapted by removing those features that was felt unnecessary and by adding a few new ones. Main changes refer to users' authentication management, that was limited to the system administrator, and the addition of listings based on authors' names. From an architectural point of view, special attention was devoted to the annotation of contributions on the basis of their types (invited lectures, oral communications, posters), topic (according to meetings' sessions) and keywords (topic according to a unified list of topics). Scientific contributions were inserted into the system by using different techniques, depending on the format of original documents. When possible, manual copying was avoided, and electronic format exchanges were carried out, e.g. by transforming texts from MS Word to PDF. All authors' names were checked and corrected so that a uniform format was achieved. This includes a list of names separated by commas, each name being represented by the surname followed by initials, without any dot, like, e.g., in 'Smith I, Maxwell M-A, Goodfellow SGD'. Authors names were also checked for typing errors and non-uniform designation of the same researcher, e.g. only one vs more initials.

Results

The Virtual Library for BITS Meetings is publicly available on-line at http://bioinformatics.istge.it/bits_library. It currently includes 455 scientific contributions, abstracts and papers, from five Biocomp annual meetings (from 1999 to 2003) and from three BITS annual meetings (from 2004 to 2007, but 2006). Currently, annotation is still incomplete and it is limited to information originally included in abstracts' books. A list of authors has been compiled and all abstracts have been associated to the list of authors in the correct format. Scientific contributions can be searched by authors' name, title and abstract contents (free text search). Contributions can also be listed by meeting and by topic. When a contribution of interest is sought, the abstract, if available, can be downloaded. Finally, a PDF version of the contribution can be downloaded or displayed on the monitor. An extensive annotation of contributions is going on and it will allow to see lists of contributions by single authors or by co-workers of an author. Data on contributions submitted to BITS 2006 and 2009 will soon be added.

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