# JIDM - Journal of Information and Data Management<sup>1</sup>

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**Abstract.** JIDM is an electronic publication focusing on information and data management in large repositories and document collections. This article introduces the journal, its scope and topics, and the submission process. Finally, it also summarizes information on SBBD, due to its close relation with the symposium.

Categories and Subject Descriptors: H.2 [Database Management]: Miscellaneous; H.3 [Information Storage and Retrieval]: Miscellaneous; I.7 [Document and Text Processing]: Miscellaneous

Keywords: JIDM, SBBD, template

## 1. CALL FOR CONTRIBUTIONS

JIDM is an electronic publication focusing on information and data management in large repositories and document collections. It relates to different areas from Computer Science, including databases, information retrieval, digital libraries, knowledge discovery, data mining, geographical information systems, among others.

## 1.1 Scope and Topics

JIDM welcomes articles on a full range of research on information and data management, including (but not limited to):

- —Active Databases
- —Access methods and indexing
- —Authorization, Privacy and Security
- —Concurrency Control and Recovery
- —Data Mining and Knowledge Discovery
- —Data Semantics
- —Data Visualization
- —Data Warehousing
- —Database Design

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<sup>&</sup>lt;sup>1</sup>The original version of this template, which was used up to volume 3, was created by Alberto Laender and Mirella Moro

- —Digital Libraries
- —Geographical Information Systems
- —Information Integration and Interoperability
- —Information Retrieval
- -Knowledge Bases
- —Mobile Data
- —Multidimensional and Temporal Databases
- —Multimedia Databases
- —Object-Orientation and Databases
- —Peer to peer, Parallel and Distributed Databases
- —Performance and Benchmarking
- —Query Languages and User Interfaces
- —Query Processing and Optimization
- —Scientific and Statistical Databases
- —Semi-structured Databases and XML
- —Self-managed and Autonomic Databases
- —Spatial Databases
- —Stream-based processing and Sensor Databases
- —Textual Databases
- —Web Databases
- —Web Services

## 1.2 Types of Submission

JIDM welcomes **research** articles that both lay theoretical foundations and provide new insights into the aforementioned areas. JIDM also solicits **surveys** that should make a contribution to our understanding of related topics from the information and data perspective. Eventually, JIDM may publish **reports** of meetings and working groups organized to evaluate the future of a given research field. Each article will be reviewed by three different peers.

## 1.3 Submission Instructions

Research articles should have up to 12 pages, survey articles up to 20 pages, and reports up to 6 pages. The editors should be contacted if more pages are necessary. Articles must be submitted in a PDF file according to the journal format. Articles should be submitted by JIDM website at:

http://seer.lcc.ufmg.br/index.php/jidm

#### 1.4 Format Instructions

All camera ready submissions must use LATEX. Thus, we do not provide a MS Word template. The templates for LATEX are available at the associated editor's webpage:

http://www.ic.uff.br/~vanessa/jidm

This folder has the following files:

-template.pdf

Journal of Information and Data Management, Vol. 5, No. 1, June 2014.

—jidm-template.zip

where the compacted files have:

- —jidmb.bib an example of bibliography entries
- —jidm.cls the latex template class for jidm
- —jidm.bst the latex template for bibliography entries
- —template.tex an example of tex file (with a figure in *schedule.eps*)

Prospective authors should take a look at the template.tex for more information on the format, for example: how to add more than one institution to the affiliation and references to books [Baeza-Yates and Ribeiro-Neto 1999], book chapters [Borgida et al. 2009], conference papers [Ferreira et al. 2009], conference papers on book series (e.g., LNCS) [da Silva et al. 1996], journal articles [Laender et al. 2009], PhD thesis [Moro 2007] and information published online<sup>2</sup> [Berglund et al. 2007]. The file *jidmb.bib* has examples of how to name conference proceedings and journals. In addition, Appendix A overviews the most important Latex instructions and is a "must-read" for authors with little or no experience in Latex, and Appendix B presents the most common errors.

## 2. JIDM AND SBBD

SBBD - the Brazilian Symposium on Databases- is the official database event of the Brazilian Computer Society (SBC). It is the largest venue in Latin America for presentation and discussion of research results in the database domain. SBBD joins researchers, students and practitioners, from Brazil and abroad, for discussing problems related to the main topics in modern database technologies.

From 2010 on, SBBD submission process is integrated with JIDM. Each year, SBBD has its own call for papers with specific topics and program committee. Submissions received between **December** and **May** are evaluated by SBBD PC members, while the others are evaluated by JIDM reviewers (note that there is a considerable intersection between the two sets of reviewers).

Once SBBD deadline has passed, the submissions go through a first round of revisions and the authors shall receive their reviews by middle **June**. These reviews may request the submission to be revised and the revised version must be submitted by beginning of **July** for another review round (the correct dates are published in the SBBD call for papers). The reviews and acceptances for the revised version will be sent to authors by middle **August**.

Very important: All papers published in JIDM must have a presentation in the closest SBBD, according to the following agenda. All papers accepted by middle August will be published in the October edition and presented at the upcoming SBBD. Papers that are accepted after that date should be published in the February JIDM edition and presented at SBBD in the following year. For example, Figure 1 illustrates the regular schedule for JIDM and SBBD, which is also represented in Table I (in order to show how to add figures and tables to your article).

Papers submitted to both JIDM and SBBD must not have been simultaneously submitted to any other forum (conference or journal), nor should they have already been published elsewhere. The acceptance of a paper implies that at least one of its authors will register for the symposium to present it. Submitted papers will be reviewed based on originality, relevance, technical soundness and clarity of presentation.

<sup>&</sup>lt;sup>2</sup>Note: in case the URL refers to a software, dataset source or any other information that does not have a proper author, it is better to include it as a footnote, e.g.: "Biblioteca Digital Brasileira de Computação: http://www.lbd.dcc.ufmg.br/bdbcomp"

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
JIDM		Issue 1				Issue 2				Issue 3		
SBBD				Deadlines		Notification	Revised version	Final acceptance		Presentations		

Fig. 1. JIDM and SBBD schedules: as a figure

Table I. JIDM and SBBD schedules: as a table (with different font resources)

		Jan	Feb	Mar	Apr	May	Jun	٦	Aug	Sep	Oct	Nov	Dec
ĺ	JIDM	_	Issue 1	_	_	_	Issue 2	_	_	_	Issue 3	-	-
ĺ	SBBD	_		_	SBBD		Notification	Revised	Final	_	Presentations	_	-
					Dea	dlines		Version	Acceptance				

Full papers must be composed using the JIDM template. Papers exceeding the page limit of the submission type will be automatically rejected without being reviewed by the Program Committee. In addition, all papers must be submitted in PDF format. Formats other than PDF will NOT be accepted. However, exceptionally and upon request, generic postscript might be accepted.

#### 3. FURTHER INFORMATION

Further information regarding JIDM may be found at its webpage:

http://seer.lcc.ufmg.br/index.php/jidm

Other questions regarding JIDM should be emailed to the editors:

Editor in Chief - Ana Carolina Salgado, email: jidm.eic@gmail.com

Associate Editor - Vanessa Braganholo, email: vanessa@ic.uff.br

#### REFERENCES

Baeza-Yates, R. A. and Ribeiro-Neto, B. A. Modern Information Retrieval. ACM Press / Addison-Wesley, 1999. Berglund, A., Boag, S., Chamberlin, D., Fernández, M. F., Kay, M., Robie, J., and Siméon, J. XML Path Language (XPath) 2.0, W3C Recommendation. http://www.w3.org/TR/xpath20, 2007.

Borgida, A., Casanova, M. A., and Laender, A. H. F. Logical Database Design: from Conceptual to Logical Schema. In L. Ling and T. M. Özsu (Eds.), *Encyclopedia of Database Systems*. Springer, Berlin, pp. 1645–1649, 2009.

DA SILVA, A. S., LAENDER, A. H. F., AND CASANOVA, M. A. An Approach to Maintaining Optimized Relational Representations of Entity-Relationship Schemas. In B. Thalheim (Ed.), *Conceptual Modeling*. Lecture Notes in Computer Science, vol. 1920. Springer, Berlin Heidelberg, pp. 292–308, 1996.

Ferreira, A. A., Gonçalves, M. A., Almeida, J. M., Laender, A. H. F., and Veloso, A. Sygar - A Synthetic Data Generator for Evaluating Name Disambiguation Methods. In *Proceedings of the European Conference on Research and Advanced Technology for Digital Libraries*. Corfu, Greece, pp. 437–441, 2009.

Laender, A. H. F., Moro, M. M., Nascimento, C., and Martins, P. An X-ray on Web-available XML Schemas. SIGMOD Record 38 (1): 37–42, 2009.

Moro, M. M. The Role of Structural Aggregation for Query Processing over XML Data. Ph.D. thesis, University of California, Riverside (UCR), USA, 2007.

## APPENDIX A. LATEX INSTRUCTIONS

This section overviews some basic instructions for writing an article to JIDM using LATEX.

## FIRST LINES

Journal of Information and Data Management, Vol. 5, No. 1, June 2014.

The first lines of your tex file identify the document class, packages, new definitions and environments the article will use. Specifically:

(1) The document class must be *jidm.cls* and is defined as follows:

```
\documentclass[jidm,a4paper]{jidm}
```

Note that JIDM is published on A4 paper.

(2) You may use as many packages as you want. However, we suggest you use graphicx and url for figures and url format, and fontenc for avoiding warnings such as "LaTeX Font Warning: Font shape 'OMS/cmtt/m/n' undefined". You can define them as follows:

```
\usepackage{graphicx,url}
\usepackage[T1]{fontenc}
```

Please note that including the package cite may conflict with our template for bibliographic references (jidm.bst).

(3) You may also use new definitions, such as the ones included in JIDM template:

```
\newtheorem{theorem}{Theorem}[section]
\newtheorem{conjecture}[theorem]{Conjecture}
\newtheorem{corollary}[theorem]{Corollary}
\newtheorem{proposition}[theorem]{Proposition}
\newtheorem{lemma}[theorem]{Lemma}
\newdef{definition}[theorem]{Definition}
\newdef{remark}[theorem]{Remark}
```

(4) You may also add new environments, such as the one included in JIDM template:

```
\newenvironment{latexcode}
{\vspace{0.1in}\setlength{\parindent}{18pt}}
{\vspace{0.1in}}
```

## MANDATORY FIELDS

The initial lines are followed by mandatory fields which compose the article metadata. It is very important that all of them be correctly written as follows.

(1) The footer of each article includes the name of the journal, and volume, number, month and year of its publication; the footer of the title page has also the initial and final page numbers; each page is also numbered (at the external margin). This information is given by the editors prior to the article publication. In order to add it to your article, use the following.

```
\jidmVolume{3}
\jidmNumber{1}
\jidmYear{12}
\jidmMonth{February}
\setcounter{page}{3}
```

Note that the *setcounter* establishes the number of the first page of your article.

(2) Each article has a left and right-headers composed of two parts: the abbreviated names of the authors and the title. Both parts are defined as follows:

```
\markboth{A. H. F. Laender and M. M. Moro}
```

```
{JIDM - Journal of Information and Data Management}
```

Note that the first parameter has the authors, which are defined following these rules:

- —If there is one author, then use author's full name, such as Alberto H. F. Laender.
- —If there are two or three authors, then abbreviate each author's first name such as A. H. F. Laender and M. M. Moro.
- —If there are more than three authors, then the format is Alberto H. F. Laender et. al..

The second parameter is the title. If the title is too long, contract it by omitting subtitles and phrases, *not* by abbreviating words.

(3) The title of the article is defined as follows:

```
\title{JIDM - Journal of Information \\ and Data Management}
```

Note that if you want to break the title in two or more lines, just add a line within it with two consecutive backlashes  $(\)$ .

(4) After the title, you need to define the name of the authors and their affiliations, as follows.

```
\author{Alberto H. F. Laender, Mirella M. Moro}
\institute{Universidade Federal de Minas Gerais, Brazil \\
\email{\{laender, mirella\}@dcc.ufmg.br}
```

Note that both authors belong to the same university. If you have authors from different places, you write their information as follows:

```
\author{Alberto H. F. Laender\inst{1}, Mirella M. Moro\inst{2}}
\institute{Universidade Federal de Minas Gerais, Brazil \\
\email{laender@dcc.ufmg.br}
\and
Mirella's Own Company, Brazil \\
\email{mirella@dcc.ufmg.br} }
```

(5) The next step is to add the abstract within its environment, as follows.

```
\begin{abstract}
Text of your abstract using from 100 to 300 words, without any references.
Also, do avoid breaking it into paragraphs.
\end{abstract}
```

(6) After the abstract, you should include information for the ACM Computing Classification, as follows.

```
\category{H.4.0}{Information Systems Applications}{General}
```

where the last argument (which contains the subject descriptors) is optional, since some categories have none. Multiple subject descriptors are separated by  $\$  and commands, for example:

```
\category{I.7.2}{Text Processing}{Document Preparation} [Languages \and Photocomposition])
```

If you have more than one category, use a separate \category declaration. The list of categories is available at the website http://www.acm.org/about/class/1998/.

(7) Then, the keywords are specified in alphabetical order as follows.

```
\keywords{JIDM, SBBD, template}
```

Note that keywords can also be expressions, such as XML query optimization.

(8) The article then begins as follows.

```
\begin{document}
```

(9) It is common to thank funding agencies for research grants. If necessary, that information is defined in the *bottomstuff* environment, as follows.

```
\begin{bottomstuff}
This work was partially funded by NSF grant number XYZ.
\end{bottomstuff}
```

(10) All the previous items complete the initial part of the article. Then, you need to use the  $\mbox{} maketitle$  command, which generates and formats all the previous items, as follows.

```
\maketitle
```

## BODY CONTENT

The article then follows with its regular content with sections and subsections as follows.

```
\section{Section title} which defines a section in first level (i.e., 1. Section Title).
\subsection{Subsection title} which defines a section in second level (i.e., 1.1. Subsection Title).
```

\subsubsection{Subsubsection title} defines a section in third level (i.e., 1.1.1. Subsubsection Title).

For further information, we refer to the following web sources:

```
--http://en.wikibooks.org/wiki/LaTeX
--http://www.latex-project.org/
```

#### FINISHING YOUR ARTICLE

At the end of your article, you may add appendix sections as follows.

```
\appendix
\section{Title of first appendix section}
Text text text
```

Then, you add the dates (if you do not add these lines, the footer of the title page will be wrong), as follows:

```
\begin{received} \end{received}
```

Finally, you must refer to the bibliography style and file, as follows.

```
\bibliographystyle{jidm}
\bibliography{jidmb}
```

where the file *jidmb.bib* has all references. We try to keep the names of proceedings and journals following the same pattern. All references must be defined in the bib file, as follows. Please **DO NOT** include references in the tex file using thebibliography.

Please check that:

- —Words in the paper titles are capitalized;
- —Words in titles after ":" are not capitalized;
- —Conference/workshop papers have complete authors, title, proceedings name, year, paper initial and final pages, and city/country address (no series, no url, no date, no total number of pages, no publisher see template example);
- —Conference and journal names are capitalized and are not abbreviated;
- —Journal articles must have authors, title, journal name, pages, both volume and number;
- —Double check the template for conference papers published on Lecture Notes;
- —Webpage can be placed as footnote instead of reference.
- —Use double "{{" "}}" in the bib file to make sure Latex will respect the capitalizations of words in titles (e.g. title = {{A Query Language Based on SQL}})
- —In the text, citations must not be part of the text. Instead of saying "[Borgida et al. 2009] addresses the problem of...", please use the citeN command to produce sentences like this: "Borgida et al. [2009] addresses the problem of..." (the latex code for this is \citeN{BorgidaCLO9} addresses the problem of...).

```
@MISC{xpath,
   author = {Anders Berglund and Scott Boag and Don Chamberlin and
   Mary F. Fern\', {a}ndez and Michael Kay and Jonathan Robie and
   J \ (e)r \ (o)me Sim \ (e)on,
   title = {{XML Path Language (XPath) 2.0, W3C Recommendation}},
   howpublished = {http://www.w3.org/TR/xpath20},
   year = \{2007\} \}
@INBOOK{BorgidaCL09,
   chapter = {{Logical Database Design: from Conceptual to Logical Schema}},
   pages = \{1645-1649\},
   title = {{Encyclopedia of Database Systems}},
   publisher = {Springer},
   year = \{2009\},\
   editor = {Liu Ling and Tamer M. \"{0}zsu},
   author = {Alexander Borgida and Marco A. Casanova and Alberto H. F. Laender},
   address = {Berlin} }
@INPROCEEDINGS{FerreiraGALV09,
   author = {Anderson A. Ferreira and Marcos Andr{\'e} Gon\c{c}alves and Jussara
   M. Almeida and Alberto H. F. Laender and Adriano Veloso},
   title = {{SyGAR - A Synthetic Data Generator for Evaluating Name Disambiguation
   Methods}},
   booktitle = ecdl,
   year = \{2009\},\
   pages = \{437-441\},
```

```
address = {Corfu, Greece} }
@ARTICLE{LaenderMNM09,
   author = {Alberto H. F. Laender and Mirella M. Moro and Cristiano Nascimento
   and Patr\'{\i}cia Martins},
   title = {{An X-ray on Web-available XML Schemas}},
   journal = sigmodrecord,
   year = \{2009\},\
   volume = \{38\},
   pages = \{37-42\},
   number = \{1\} }
@PHDTHESIS{Moro07,
   author = {Mirella M. Moro},
   title = {{The Role of Structural Aggregation for Query Processing over XML Data}},
   school = {University of California, Riverside (UCR)},
   year = \{2007\},\
   address = {USA} }
@INBOOK{SilvaLC96,
   chapter = {{An Approach to Maintaining Optimized Relational Representations
   of Entity-Relationship Schemas}},
   pages = \{292-308\},
   title = {Conceptual Modeling},
   publisher = {Springer},
   year = \{1996\},\
   editor = {Bernhard Thalheim},
   author = {Altigran Soares da Silva and Alberto H. F. Laender and Marco A. Casanova},
   volume = \{1920\},\
   series = {Lecture Notes in Computer Science},
   booktitle = er }
```

#### APPENDIX B. MOST COMMON ERRORS

This section lists the most common errors when writing your paper. Note that *any* of these errors will certainly make the editors contact you for correction.

- —Files do not compile. Editors will create the pdf files from the tex sources you submitted.
- —Referring to work as "paper": you should refer to your work as article.
- —JIDM metadata different from pdf file: author names must be exactly the same in the pdf as in the metadata at JIDM website [including abbreviations and uppercase letters].
- —Generic categories: the item "Categories and Subject Descriptors" should be other than "Databases" (since that is too generic).
- —Wrong header: with two or three authors, the header is as "A. H. F. Laender and M. M. Moro"; otherwise, it is "Alberto H. F. Laender et. al." (use  $\mbox{$\backslash$markboth}$ ).
- —Acknowledgments as section/subsection: acknowledgments must be in the appropriate place (using environment  $\begin{tabular}{c} bottomstuff \end{tabular}$ ).
- —Long/wrong abstract: abstract should have only one paragraph; in the jidm metadata, it cannot have tex commands.

- —Incomplete/wrong references: \*all\* references must strictly follow JIDM template, i.e., conference/workshop papers with complete authors, title, proceedings name, year, paper initial and final pages, and city/country address (no series, no url, no date, no total number of pages, no publishersee template example); journal articles must have authors, title, journal name, pages, both volume and number; double check the template for conference papers published on Lecture Notes; webpage can be footnote instead of reference.
- —Undefined references.
- —Style: try to avoid orphan words (one word alone in one line), orphan lines (one line alone at the beginning of a page), single subsections (e.g., section 3, subsection 3.1, section 4); place figures and tables at the top [t] or bottom [b] of your pages.
- —File compiles with warnings: try to eliminate all warnings, they may affect the final pdf.
- —Wrong characters: words in Portuguese (even inside bib file) must have proper characters (e.g., Computa\c{c}\^{a}o).
- —Outdated template: check the website for the updated template (which corrected some errors from the previous one).