

# COMP 516

## Research Methods in Computer Science

Dominik Wojtczak

Department of Computer Science  
University of Liverpool

1 / 28

### Bibliography styles

- We will cover some of the standard bibliographic styles
- For your essay, the most important thing is that you use one consistently

3 / 28

# COMP 516

## Research Methods in Computer Science

### Lecture 7: Bibliographies and Referencing (2)

Dominik Wojtczak

Department of Computer Science  
University of Liverpool

2 / 28

### Styles: Ordinal Number

- Sources listed in the bibliography are sorted according to some ordering, typically based on the authors' names, and numbered consecutively
- References in the text are given as (lists of) numbers cross-referencing the bibliography, enclosed in square brackets

#### Example:

Key techniques for utilising temporal logic specifications have been investigated, including verification via proof [3] and verification via model-checking [1,2].

#### Bibliography

1. E. Clarke, O. Grumberg, and D. A. Peled. *Model Checking*. MIT Press, 2000.
2. K. L. McMillan. *Symbolic Model Checking*. Kluwer, 1993.
3. M. Vardi and P. Wolper. Reasoning about infinite computations. *Inform. and Comput.*, 115:1–37, 1994.

4 / 28

## Styles: Author-Date (1)

- Sources in the reference list are arranged alphabetically by the authors' names;

### Example:

#### Bibliography

E. Clarke, O. Grumberg, and D. A. Peled (2000). *Model Checking*. MIT Press.  
K. L. McMillan (1993). *Symbolic Model Checking*. Kluwer.  
M. Vardi and P. Wolper (1994). Reasoning about infinite computations. *Inform. and Computat.*, 115:1–37.

5 / 28

## Styles: Author-Date (1)

- Sources in the reference list are arranged alphabetically by the authors' names;  
where there is more than one work by the same authors, they are arranged by year of publication, starting with the earliest;  
where there is more than one work with the same authors and date, a letter is added to the year of publication to distinguish them

### Example:

#### Bibliography

P. Wolper (1996a). Where is the Algorithmic Support? *ACM Comput. Surv.* 28(4): 58.  
P. Wolper (1996b). The Meaning of “Formal”. *ACM Comput. Surv.* 28(4): 127.

6 / 28

## Styles: Author-Date (2)

- A reference is given by the authors' names and the date enclosed in parentheses unless the authors' names are part of the sentence

### Example of quoting:

The following is an extract from (Wolper 1996a):

*Consider, for instance, the issue of compositionality in proof systems for concurrency. I am not going to argue that compositionality is undesirable, but that achieving it without algorithmic support (in a broad sense) is easy and mostly useless.*

### Example of citing:

While Wolper (1996a) does not argue that compositionality in proof systems for concurrency is undesirable, he claims that achieving it without algorithmic support is mostly useless.

7 / 28

## Styles: Author-Date (2)

- A reference is given by the authors' names and the date enclosed in parentheses unless the authors' names are part of the sentence

### Examples:

Recent work (Wolper 1996a, 1996b) stresses the importance of algorithmic support for formal methods.

Wolper (1996a, 1996b) stresses the importance of algorithmic support for formal methods.

The completion procedure may fail in general, but has been extended to a refutationally complete theorem prover (cf. Lankford 1975, Hsiang and Rusinowitch 1987, and Bachmair, Dershowitz and Plaisted 1989). Completion procedures for conditional equations have been described by Kounalis and Rusinowitch (1988), and by Ganzinger (1987a, 1987b).

8 / 28

## Styles: Abbreviation (1)

- Mix of ordinal number style and author-date style
- Sources in the bibliography are presented like in ordinal number style, but instead of numbering them, each source is given a unique identifier based on authors' names and year of publication, with additional letters to disambiguate duplicate abbreviations

### Example:

#### Bibliography

- [CGP00] E. Clarke, O. Grumberg, and D. A. Peled. *Model Checking*. MIT Press, 2000.
- [vdG94] R. A. van der Goot. *Strategies for modal resolution*. Master's thesis, Delft University of Technology, The Netherlands, 1994.
- [Wol96a] P. Wolper. Where is the Algorithmic Support? *ACM Comput. Surv.* 28(4):58, 1996.
- [Wol96b] P. Wolper. The Meaning of "Formal". *ACM Comput. Surv.* 28(4):127, 1996.

9 / 28

## Styles: Abbreviation (2)

- References in the text are given as (lists of) abbreviations cross-referencing the bibliography, again enclosed in square brackets

### Examples:

Key techniques for utilising temporal logic specifications have been investigated, including verification via proof [VW94] and verification via model-checking [CGP00,McM93].

Recent work [Wol96a, Wol96b] stresses the importance of algorithmic support for formal methods.

Wolper in [Wol96a,Wol96b] stresses the importance of algorithmic support for formal methods.

The completion procedure may fail in general, but has been extended to a refutationally complete theorem prover (cf. [Lan75,HR87,BDP89]).

Completion procedures for conditional equations have been described by Kounalis and Rusinowitch [KT88], and by Ganzinger [Gan87a,Gan87b].

10 / 28

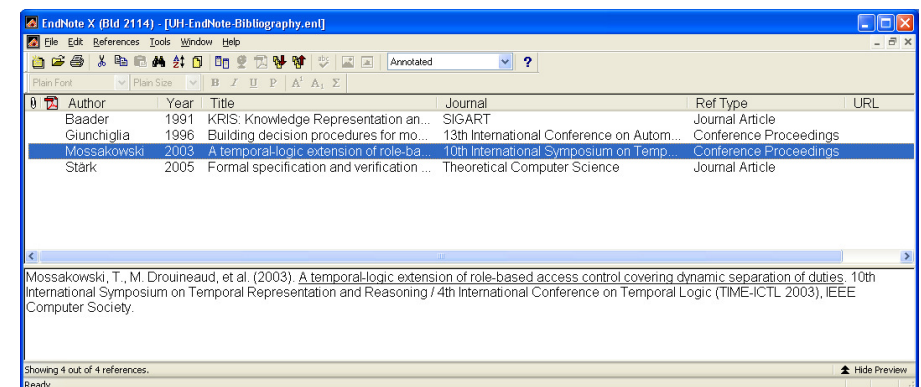
## Organising References

- There are myriads of styles for references and bibliographies
- You should maintain information on your sources in a 'neutral' format
- Ideally, you should use a tool which
  - supports such a 'neutral' format
  - allows to add, delete, modify references
  - allows to search for references
  - interacts with your word processor/text editor
  - generates a list of references in any desired format

11 / 28

## Organising References: EndNote

EndNote is a [reference manager](#) available for Microsoft Windows and Mac OS X which interfaces with Microsoft Word



12 / 28

## EndNote: Entering References

EndNote X (Bld 2114) - [Mossakowski, #3]

File Edit References Tools Window Help

Reference Type: Conference Proceedings

Author: Mossakowski, Till  
Drouineaud, Michael  
Sohr, Karsten

Year of Conference: 2003

Title: A temporal-logic extension of role-based access control covering dynamic separation of duties

Editor:

Conference Name: 10th International Symposium on Temporal Representation and Reasoning / 4th International Conference on Temporal Logic (TIME-ICTL 2003)

Conference Location:

Publisher: IEEE Computer Society

Volume:

Number of Volumes:

Pages: 83-90

Ready

13 / 28

## EndNote: Choosing Bibliography Styles (1)

EndNote allows you to format your citations and your bibliography in a number of styles

EndNote X (Bld 2114) - [EndNote Styles]

File Edit References Tools Window Help

Style Name: Lecture Notes in Comp Sci

Name	Category
Public Opinion Quarterly	Communications and Media
Inf J Comp for Math Learn	Computer Science
J Comp and System Sci	Computer Science
J Functional Programming	Computer Science
J Parallel and Dist Comp	Computer Science
<input checked="" type="checkbox"/> Lecture Notes in Comp Sci	Computer Science
SIAM	Computer Science
Family Consumer Science Res J	Consumer Science

Find Mark All Unmark All Edit

Less Info: Style Info

File Name: Lecture Notes in Comp Sci  
Created: 15 July 2005, 10:06:00  
Modified: 15 July 2005, 10:06:00  
Based On:  
Category: Computer Science

Comments: Author Instructions:  
<http://www.springeronline.com/sgw/cda/frontpage/0,11855,4-164-0-0-0,00.html?>

Showing 2306 of 2306 output styles from C:\Program Files\EndNote X\Styles\

14 / 28

## EndNote: Choosing Bibliography Styles (2)

EndNote X (Bld 2114) - [UH-EndNote-Bibliography.enl]

File Edit References Tools Window Help

Reference Type: Lecture Notes in Comp Sci

Author	Year	Title	Journal
Baader	1991	KRIS: Knowledge Representation an...	SIGART
Giunchiglia	1996	Building decision procedures for mo...	13th International Conference on Autom...
Mossakowski	2003	A temporal-logic extension of role-ba...	10th International Symposium on Temp...
Stärk	2005	Formal specification and verification ...	Theoretical Computer Science

Showing 4 out of 4 references.

Ready

15 / 28

## EndNote: Interacting with Word (1)

Document1 - Microsoft Word

File Edit View Insert Format Tools Table Window Help

100% Read

CharterBT-Roman 12

Introduction

In (Giunchiglia, 1996 #2), Giunchiglia and Sebastiani presented an approach to building decision procedures for the modal logic  $K_m$  (or its syntactic variant, the description logic ALC) based on DPLL procedures for propositional logic. As a proof-of-concept they implemented the KSAT system based on this approach. In a comparison with other systems, among them the KRIS system described in, they demonstrated the effectiveness their approach.

In our first lab session, we were asked to locate papers (Baader, 1991 #1; Giunchiglia, 1996 #2) on the web. The library subscription to the ACM digital library allows us to download without charge. However, the library only has a subscription for Springer Le onwards, which means that

Finally, in our first lab sessi

Bibliography

Author	Year	Title	Journal
Baader	1991	KRIS: Knowledge Representation an...	SIGART
Giunchiglia	1996	Building decision procedures for mo...	13th International Conference on Autom...
Mossakowski	2003	A temporal-logic extension of role-ba...	10th International Symposium on Temp...
Stärk	2005	Formal specification and verification ...	Theoretical Computer Science

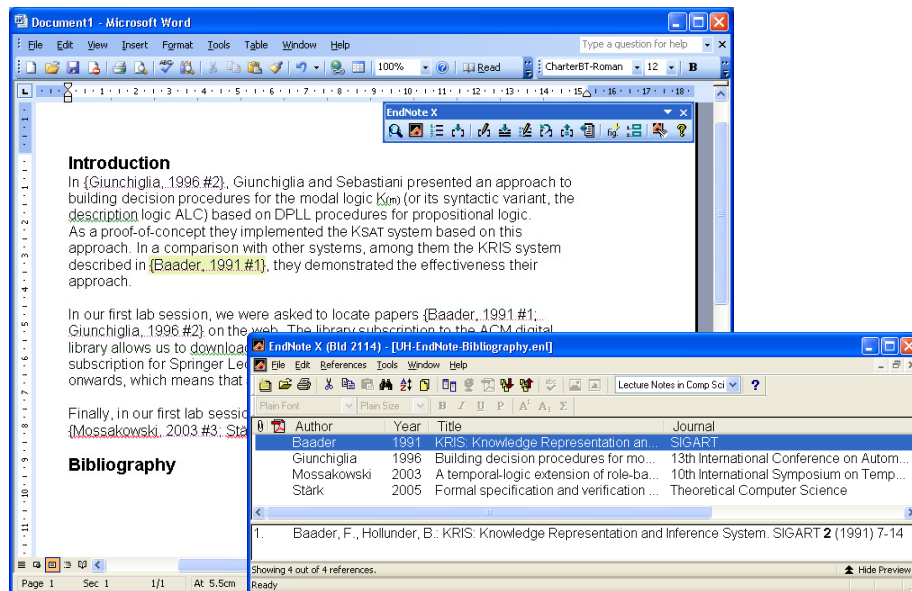
1. Baader, F., Hollunder, B.: KRIS: Knowledge Representation and Inference System. SIGART 2 (1991) 7-14

Showing 4 out of 4 references.

Ready

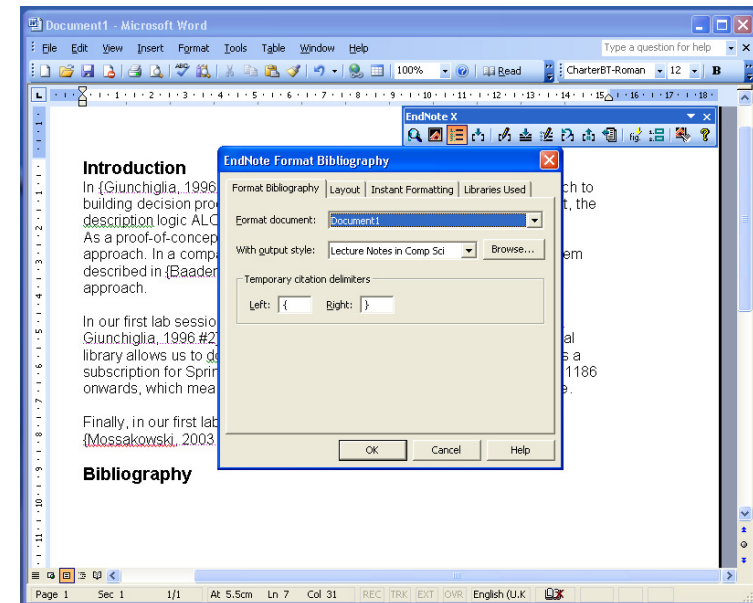
16 / 28

## EndNote: Interacting with Word (2)



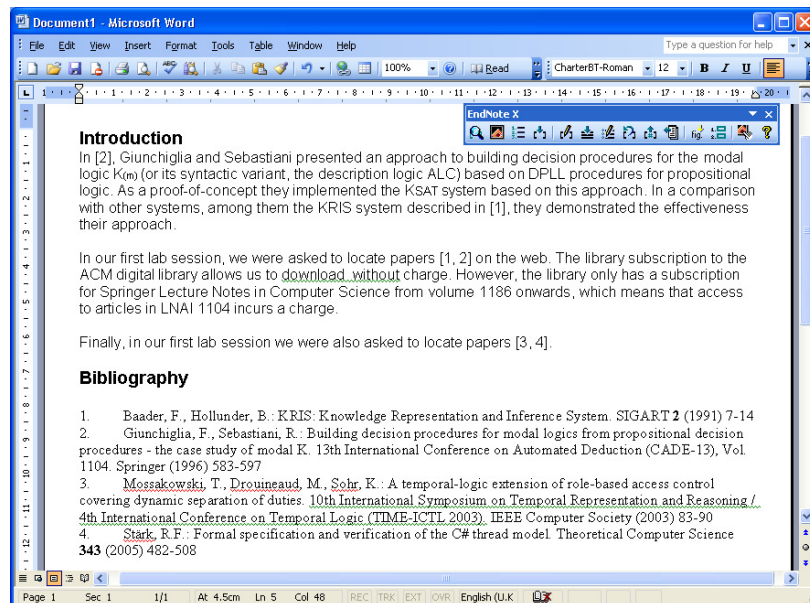
17 / 28

## EndNote: Creating a Bibliography (1)



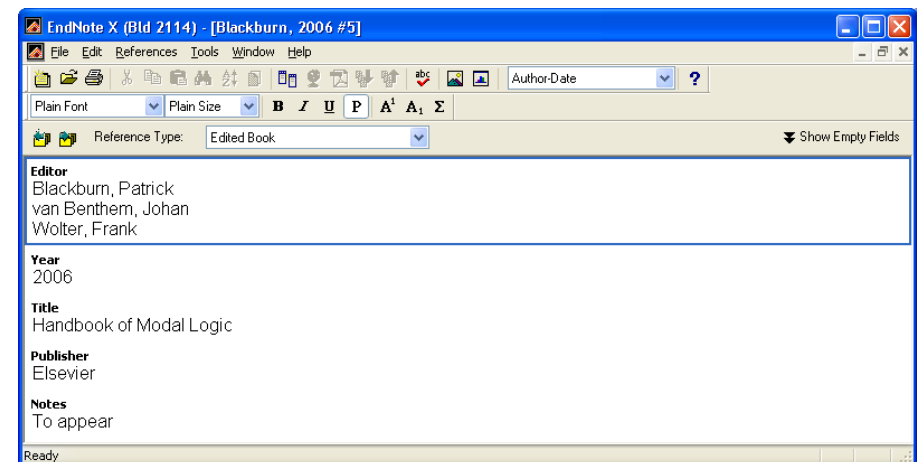
18 / 28

## EndNote: Creating a Bibliography (2)



19 / 28

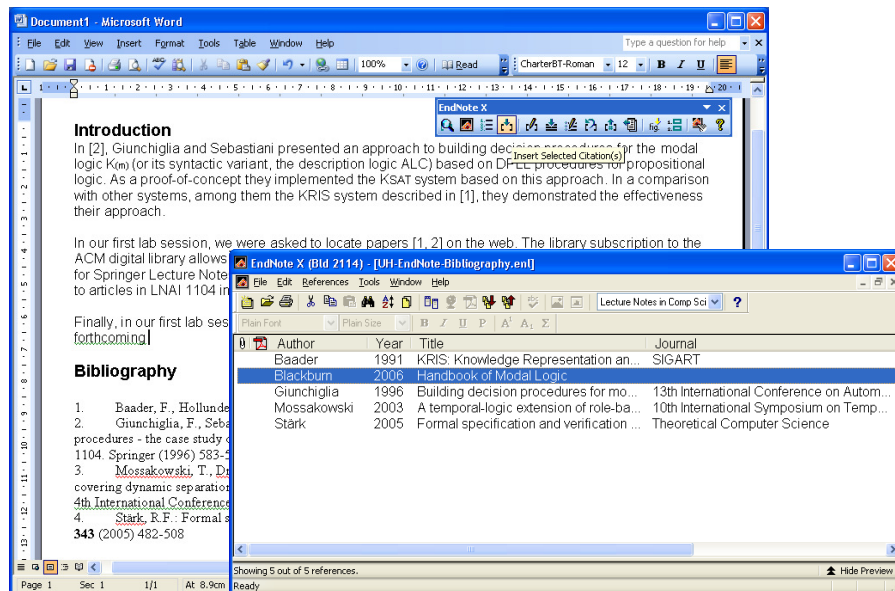
## EndNote: Entering More References



20 / 28

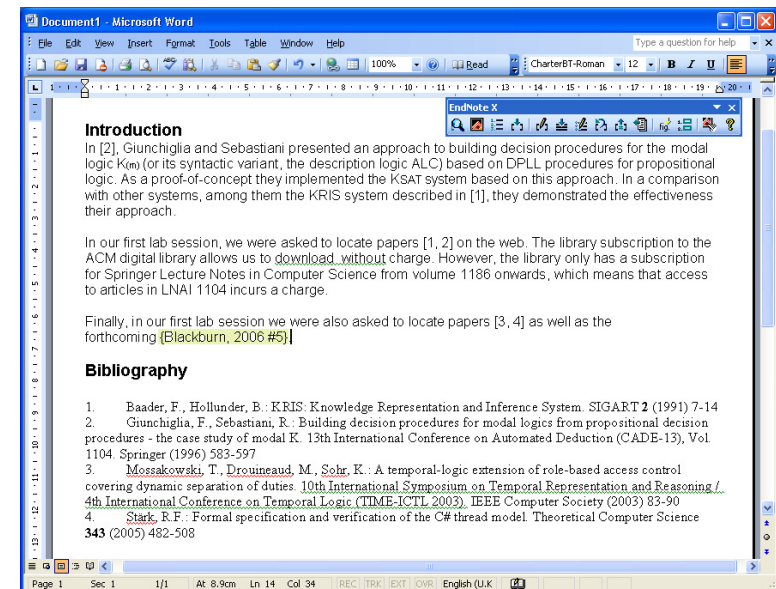


## EndNote: Interacting with Word (3)



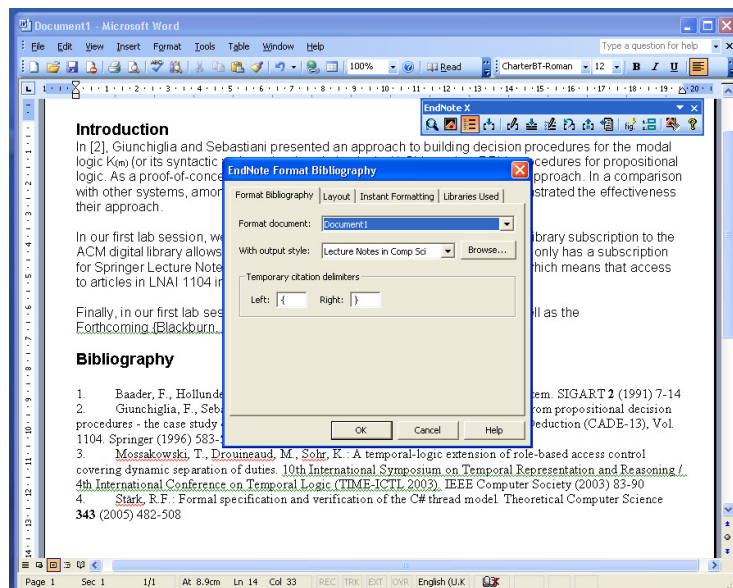
21/28

## EndNote: Interacting with Word (4)



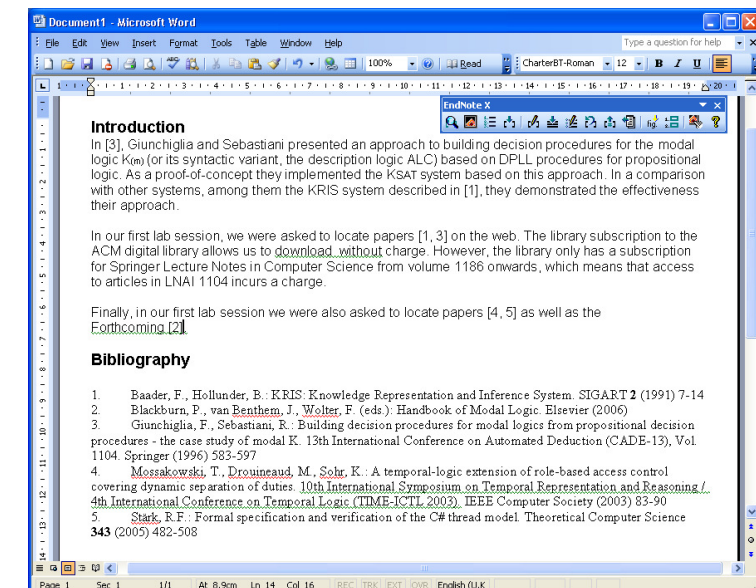
22/28

## EndNote: Updating a Bibliography (1)



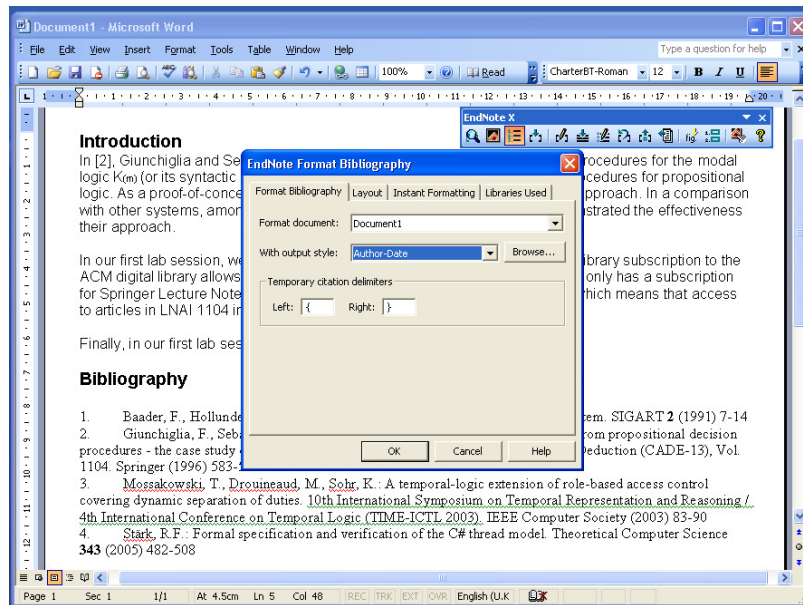
23/28

## EndNote: Updating a Bibliography (2)



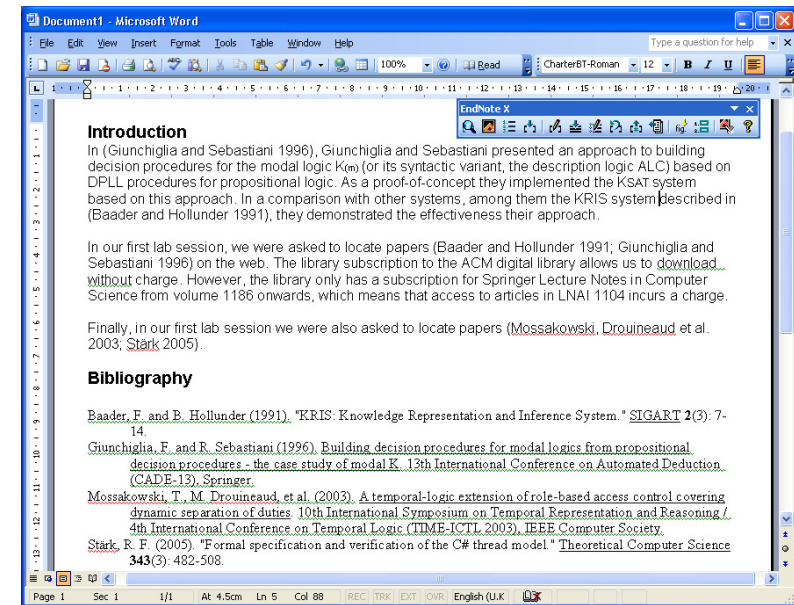
24/28

## EndNote: Re-formatting a Bibliography (1)



25 / 28

## EndNote: Re-formatting a Bibliography (2)



26 / 28

## The Alternatives

- RefWorks
- Mendeley
- Zotero
- Delicious
- CiteULike

27 / 28

## Conclusion

- Tools like EndNote, RefWorks, Citeulike, Mendeley and Zotero (which is free) help you maintain a large set of bibliographic references
- They ease the burden of referencing and generating lists of references according to a specific style
- If no specific style is requested, then a providing all the necessary information about each of your sources in a **consistent way** is the most important aspect of a bibliography
- Beware that the way you formulate sentences which include references depends on the referencing style; changing that style later on is time-consuming and error-prone

28 / 28